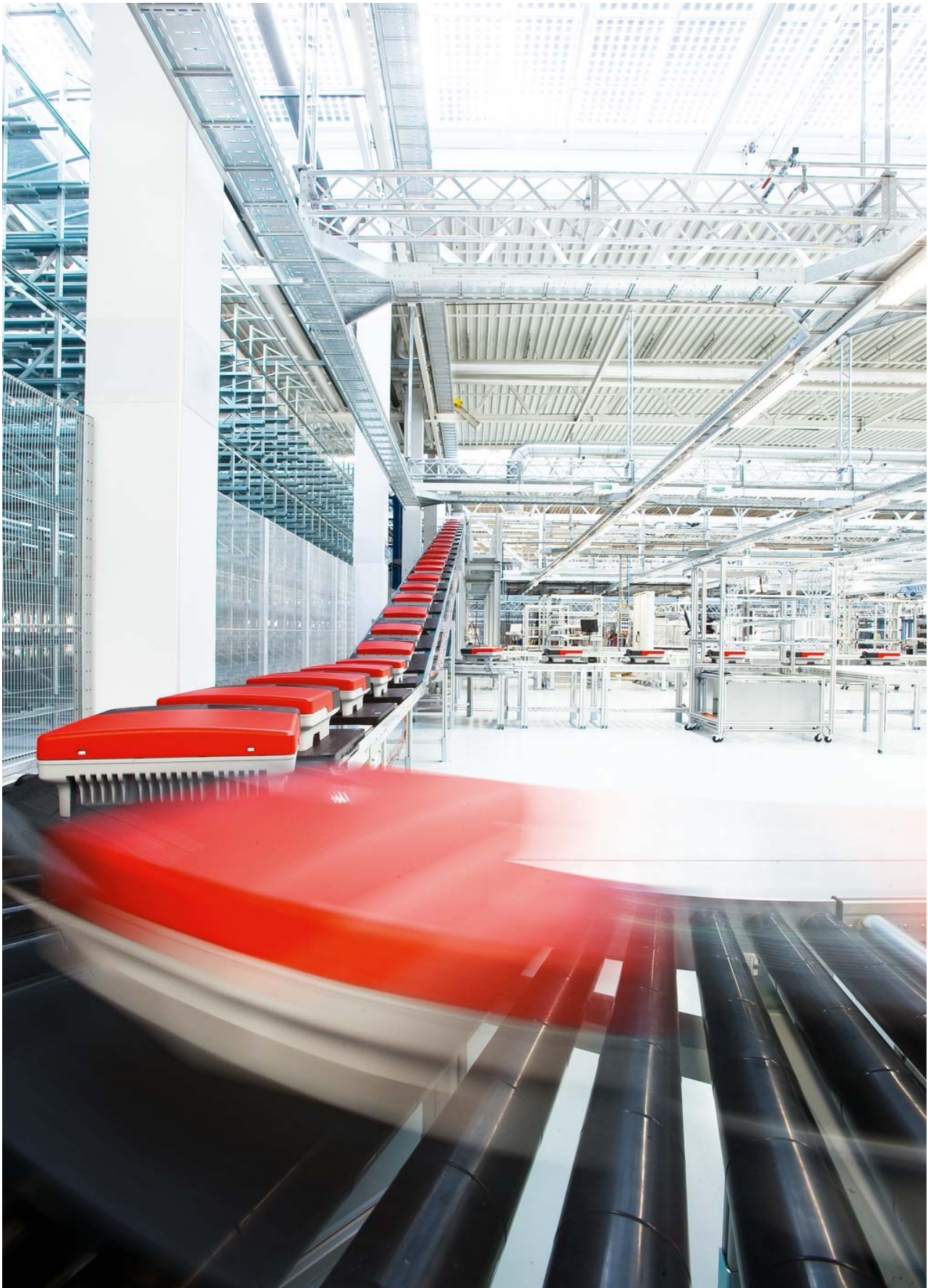




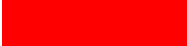






## Product information

Valid from 01.01.2013 to 31.12.2013





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## Description of the Symbols Used



This symbol indicates a specification of a product or an information which is important for correct ordering (e. g. differences in version). Please pay special attention to these sections in order to avoid incorrect ordering.



## Exclusion of liability and Terms of delivery

### Terms of delivery

The General Terms and Conditions of Delivery of SMA Solar Technology AG shall apply. Other agreements apply only, if they have been explicitly confirmed by SMA in writing.

This price list replaces and renders invalid all previous prices.

### Exclusion of liability

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# Inverters without transformer

SUNNY TRIPOWER





**Sunny Tripower 20000TL Economic Excellence (STP 20000TLEE-10)**

Valid from: as provided in contract

<b>STP 20000TLEE-10 (price before options):</b>	x	xx	0	x	x	-	xx	xx	PV inverter for grid feed-in Pac,r/Sac, max 2 0000 W/ 2 0000 VA three-phase feed-in, 98.5 % maximum efficiency, with reactive power supply, transformerless, graphic display, rotary switch for language settings SMA Bluetooth® communication interface, integrated DC switch-disconnector, DC SUNCLIX terminal
<b>specific price 1)</b>									
<b>Communication:</b>	0	1	2						SMA Bluetooth® (integrated) SMA Bluetooth® (integrated) + RS485 SMA Bluetooth® (integrated) + Webconnect
<b>Color of lid:</b>		08							Gentian blue (additional colors on request)
<b>DC load disconnection unit:</b>			0	2					without mechanical DC switch-disconnector with mechanical DC switch-disconnector (standard)
<b>I/O port moduls:</b>			0	1	2				Without (standard) Multi-function relay Power Control Module
<b>Documentation:</b>							DE	EN	German English Spanish French Greek Italian Portuguese Czech Dutch Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>							DE	OF	Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Tripower 15000TL Economic Excellence (STP 15000TLEE-10)**

Valid from: as provided in contract

<b>STP 15000TLEE-10 (price before options):</b>	x	xx	0	x	x	-	xx	xx	PV inverter for grid feed-in Pac,r/Sac, max 1 5000 W/ 1 5000 VA three-phase feed-in, 98.5 % maximum efficiency, with reactive power supply, transformerless, graphic display, rotary switch for language settings SMA Bluetooth® communication interface, integrated DC switch-disconnector, DC SUNCLIX terminal								
<b>specific price 1)</b>																	
<b>Communication:</b>	0	1	2						SMA Bluetooth® (integrated) SMA Bluetooth® (integrated) + RS485 SMA Bluetooth® (integrated) + Webconnect								
<b>Color of lid:</b>		08							Gentian blue (additional colors on request)								
<b>DC load disconnection unit:</b>			0	2					without mechanical DC switch-disconnector with mechanical DC switch-disconnector (standard)								
<b>I/O port moduls:</b>			0	1	2				Without (standard) Multi-function relay Power Control Module								
<b>Documentation:</b>							DE	EN	ES	FR	GR	IT	PT	CZ	NL	00	German English Spanish French Greek Italian Portuguese Czech Dutch Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>							DE	OF	ZZ	Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).							

**Comments**

1) Can vary depending on options.




**Sunny Tripower 17000TL (STP 17000TL-10)**

Valid from: as provided in contract

<b>STP 17000TL-10 (price before options):</b>	x	xx	x	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac,max 17000 W/ 17000 VA three-phase feed, with reactive power supply, transformerless, graphic display, rotary coded switch for country settings SMA Bluetooth® communication interface, Multi-String function, DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>								
<b>Communication:</b>	0 1 2							SMA Bluetooth® (integrated) SMA Bluetooth® (integrated) + RS485 SMA Bluetooth® (integrated) + Webconnect
<b>Color of lid:</b>		08						Gentian blue (additional colors on request)
<b>DC overvoltage discharger:</b>		0 1 2						without DC overvoltage protector (type II) with DC overvoltage protector (type II) for input A with DC overvoltage protector (type II) for input A and B
<b>I/O port moduls:</b>			0 1 2					Without (standard) Multi-function relay Power Control Module
<b>Documentation:</b>						DE EN ES FR GR IT PT CZ NL 00		German English Spanish French Greek Italian Portuguese Czech Dutch Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>						DE OF ZZ		Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.




**Sunny Tripower 15000TL (STP 15000TL-10)**

Valid from: as provided in contract

<b>STP 15000TL-10 (price before options):</b>	x	xx	x	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac,max 15000 W/ 15000 VA three-phase feed, with reactive power supply, transformerless, graphic display, rotary coded switch for country settings SMA Bluetooth® communication interface, Multi-String function, DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>								
<b>Communication:</b>	0 1 2							SMA Bluetooth® (integrated) SMA Bluetooth® (integrated) + RS485 SMA Bluetooth® (integrated) + Webconnect
<b>Color of lid:</b>		08						Gentian blue (additional colors on request)
<b>DC overvoltage discharger:</b>		0 1 2						without DC overvoltage protector (type II) with DC overvoltage protector (type II) for input A with DC overvoltage protector (type II) for input A and B
<b>I/O port moduls:</b>			0 1 2					Without (standard) Multi-function relay Power Control Module
<b>Documentation:</b>						DE EN ES FR GR IT PT CZ NL 00		German English Spanish French Greek Italian Portuguese Czech Dutch Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>						DE OF ZZ		Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Tripower 12000TL (STP 12000TL-10)**

Valid from: as provided in contract

<b>STP 12000TL-10 (price before options):</b>	x	xx	x	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac,max 12000 W/ 12000 VA three-phase feed, with reactive power supply, transformerless, graphic display, rotary coded switch for country settings SMA Bluetooth® communication interface, Multi-String function, DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>								
<b>Communication:</b>	0 1 2							SMA Bluetooth® (integrated) SMA Bluetooth® (integrated) + RS485 SMA Bluetooth® (integrated) + Webconnect
<b>Color of lid:</b>		08						Gentian blue (additional colors on request)
<b>DC overvoltage discharger:</b>		0 1 2						without DC overvoltage protector (type II) with DC overvoltage protector (type II) for input A with DC overvoltage protector (type II) for input A and B
<b>I/O port moduls:</b>			0 1 2					Without (standard) Multi-function relay Power Control Module
<b>Documentation:</b>						DE EN ES FR GR IT PT CZ NL 00		German English Spanish French Greek Italian Portuguese Czech Dutch Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>						DE OF ZZ		Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.


**Sunny Tripower 10000TL (STP 10000TL-10)**

Valid from: as provided in contract

<b>STP 10000TL-10 (price before options):</b>	x	xx	x	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac,max 10000 W/ 10000 VA three-phase feed, with reactive power supply, transformerless, graphic display, rotary coded switch for country settings SMA Bluetooth® communication interface, Multi-String function, DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>								
<b>Communication:</b>	0 1 2							SMA Bluetooth® (integrated) SMA Bluetooth® (integrated) + RS485 SMA Bluetooth® (integrated) + Webconnect
<b>Color of lid:</b>		08						Gentian blue (additional colors on request)
<b>DC overvoltage discharger:</b>		0 1 2						without DC overvoltage protector (type II) with DC overvoltage protector (type II) for input A with DC overvoltage protector (type II) for input A and B
<b>I/O port moduls:</b>			0 1 2					Without (standard) Multi-function relay Power Control Module
<b>Documentation:</b>						DE EN ES FR GR IT PT CZ NL 00		German English Spanish French Greek Italian Portuguese Czech Dutch Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>						DE OF ZZ		Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



### Sunny Tripower 9000TL (STP 9000TL-20)

Valid from: as provided in contract

<b>STP 9000TL-20 (price before options):</b>	xx	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 9000 W/9000 VA three-phase feed-in, with reactive power supply, transformerless, graphic display, rotating selection switch for country settings SMA Bluetooth® and Webconnect communication interface, multifunctions relay, multi-string function, DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>						
<b>Color of lid:</b>	08					Gentian blue (additional colors on request)
<b>I/O port moduls:</b>	0	2				Without (standard) Power Control Module
<b>Documentation:</b>				DE		German
				EN		English
				ES		Spanish
				FR		French
				GR		Greek
				IT		Italian
				PT		Portuguese
				CZ		Czech
				NL		Dutch
				BE		French, Dutch
				DK		Danish
				00		Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>				DE		Default Setting VDE-AR-N 4105 (standard)
				OF		Default setting for offgrid operation
				ZZ		Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.



### Sunny Tripower 8000TL (STP 8000TL-20)

Valid from: as provided in contract

<b>STP 8000TL-20 (price before options):</b>	xx	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 8000 W/8000 VA three-phase feed-in, with reactive power supply, transformerless, graphic display, rotating selection switch for country settings SMA Bluetooth® and Webconnect communication interface, multifunctions relay, multi-string function, DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>						
<b>Color of lid:</b>	08					Gentian blue (additional colors on request)
<b>I/O port moduls:</b>	0	2				Without (standard) Power Control Module
<b>Documentation:</b>				DE		German
				EN		English
				ES		Spanish
				FR		French
				GR		Greek
				IT		Italian
				PT		Portuguese
				CZ		Czech
				NL		Dutch
				BE		French, Dutch
				DK		Danish
				00		Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>				DE		Default Setting VDE-AR-N 4105 (standard)
				OF		Default setting for offgrid operation
				ZZ		Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.



### Sunny Tripower 7000TL (STP 7000TL-20)

Valid from: as provided in contract

<b>STP 7000TL-20 (price before options):</b>	xx	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 7000 W/7000 VA three-phase feed-in, with reactive power supply, transformerless, graphic display, rotating selection switch for country settings SMA Bluetooth® and Webconnect communication interface, multifunctions relay, multi-string function, DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>						
<b>Color of lid:</b>	08					Gentian blue (additional colors on request)
<b>I/O port moduls:</b>	0	2				Without (standard) Power Control Module
<b>Documentation:</b>				DE		German
				EN		English
				ES		Spanish
				FR		French
				GR		Greek
				IT		Italian
				PT		Portuguese
				CZ		Czech
				NL		Dutch
				BE		French, Dutch
				DK		Danish
				00		Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>				DE		Default Setting VDE-AR-N 4105 (standard)
				OF		Default setting for offgrid operation
				ZZ		Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.



### Sunny Tripower 6000TL (STP 6000TL-20)

Valid from: as provided in contract

<b>STP 6000TL-20 (price before options):</b>	xx	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 6000 W/6000 VA three-phase feed-in, with reactive power supply, transformerless, graphic display, rotating selection switch for country settings SMA Bluetooth® and Webconnect communication interface, multifunctions relay, multi-string function, DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>						
<b>Color of lid:</b>	08					Gentian blue (additional colors on request)
<b>I/O port moduls:</b>	0	2				Without (standard) Power Control Module
<b>Documentation:</b>				DE		German
				EN		English
				ES		Spanish
				FR		French
				GR		Greek
				IT		Italian
				PT		Portuguese
				CZ		Czech
				NL		Dutch
				BE		French, Dutch
				DK		Danish
				00		Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>				DE		Default Setting VDE-AR-N 4105 (standard)
				OF		Default setting for offgrid operation
				ZZ		Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.





### Sunny Tripower 5000TL (STP 5000TL-20)

Valid from: as provided in contract

<b>STP 5000TL-20 (price before options):</b>	xx	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 5000 W/5000 VA three-phase feed-in, with reactive power supply, transformerless, graphic display, rotating selection switch for country settings SMA Bluetooth® and Webconnect communication interface, multifunctions relay, multi-string function, DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>						
<b>Color of lid:</b>	08					Gentian blue (additional colors on request)
<b>I/O port moduls:</b>	0	2				Without (standard) Power Control Module
<b>Documentation:</b>				DE		German
				EN		English
				ES		Spanish
				FR		French
				GR		Greek
				IT		Italian
				PT		Portuguese
				CZ		Czech
				NL		Dutch
				BE		French, Dutch
				DK		Danish
				00		Language package (DE, EN, ES, FR, GR, IT, PT, CZ, NL)
<b>Country specific grid settings:</b>				DE		Default Setting VDE-AR-N 4105 (standard)
				OF		Default setting for offgrid operation
				ZZ		Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.



**Sunny Mini Central 11000TL (SMC 11000TLRP-10) with Reactive Power Control**

Valid from: as provided in contract

<b>SMC 11000TLRP-10 (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac,max 11000 W/11000 VA with reactive power supply transformerless, text display, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>										
<b>Communication:</b>	5									without communication interface
	8									RS485
	B									SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Documentation:</b>									DE	German
									EN	English
									ES	Spanish
									FR	French
									GR	Greek
									PT	Portuguese
									CZ	Czech
									NL	Dutch
<b>Country specific grid settings:</b>									DE	Default Setting VDE-AR-N 4105 (standard)
									OF	Default setting for offgrid operation
									ZZ	Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Mini Central 10000TL (SMC 10000TLRP-10) with Reactive Power Control**

Valid from: as provided in contract

<b>SMC 10000TLRP-10 (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac,max 10000 W/10000 VA with reactive power supply transformerless, text display, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>										
<b>Communication:</b>	5									without communication interface RS485 SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Documentation:</b>									DE EN ES FR GR PT CZ NL	German English Spanish French Greek Portuguese Czech Dutch
<b>Country specific grid settings:</b>									DE OF ZZ	Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Mini Central 9000TL (SMC 9000TLRP-10) with Reactive Power Control**

Valid from: as provided in contract

<p><b>SMC 9000TLRP-10</b> (price before options):</p>	x	0	0	x	4	1	-	xx	xx	<p>Solar inverter for grid feed-in Pac,r/Sac,max 9000 W/9000 VA with reactive power supply transformerless, text display, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)</p>
specific price 1)										
<p><b>Communication:</b></p>	5									<p>without communication interface RS485 SMA Bluetooth®</p>
<p><b>Color of lid:</b></p>			0							<p>red (additional colors on request)</p>
<p><b>Documentation:</b></p>									<p>DE EN ES FR GR PT CZ NL</p>	<p>German English Spanish French Greek Portuguese Czech Dutch</p>
<p><b>Country specific grid settings:</b></p>									<p>DE OF ZZ</p>	<p>Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).</p>

**Comments**

1) Can vary depending on options.



**Sunny Mini Central 8000TL (SMC 8000TL)**

Valid from: as provided in contract

<b>SMC 8000TL (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 8000 W/8000 VA transformerless, text display, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
specific price 1)										
<b>Communication:</b>	5									without communication interface RS485 SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Documentation:</b>									DE EN ES FR GR PT CZ NL	German English Spanish French Greek Portuguese Czech Dutch
<b>Country specific grid settings:</b>									DE OF ZZ	Grid parameter country settings: Default Setting VDE0126-1-1 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Mini Central 7000TL (SMC 7000TL)**

Valid from: as provided in contract

<b>SMC 7000TL (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 7000 W/7000 VA transformerless, text display, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
specific price 1)										
<b>Communication:</b>	5									without communication interface RS485 SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Documentation:</b>									DE EN ES FR GR PT CZ NL	German English Spanish French Greek Portuguese Czech Dutch
<b>Country specific grid settings:</b>									DE OF ZZ	Grid parameter country settings: Default Setting VDE0126-1-1 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Mini Central 6000TL (SMC 6000TL)**

Valid from: as provided in contract

<b>SMC 6000TL (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 6000 W/6000 VA transformerless, text display, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
specific price 1)										
<b>Communication:</b>	5									without communication interface
	8									RS485
	B									SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Documentation:</b>									DE	German
									EN	English
									ES	Spanish
									FR	French
									GR	Greek
									PT	Portuguese
									CZ	Czech
									NL	Dutch
<b>Country specific grid settings:</b>									DE	Grid parameter country settings: Default Setting VDE0126-1-1 (standard)
									OF	Default setting for offgrid operation
									ZZ	Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.





### Sunny Boy 5000TL (SB 5000TL-21)

Valid from: as provided in contract

<b>SB 5000TL-21 (price before options):</b>	x	xx	4	x	-	xx	xx	PV inverter for grid feed-in Pac,r/Sac, max 4600 W/ 5000 VA* transformerless, for reactive power feed-in, graphic display, rotary switch for country settings SMA Bluetooth® communication interface, multistring function, DC connection SUNCLIX, incl. Electronic Solar Switch (ESS)
specific price 1)								
<b>Communication:</b>	0							SMA Bluetooth® (integrated)
	1							SMA Bluetooth® (integrated) + RS485
	2							SMA Bluetooth® (integrated) + Webconnect
<b>Color of lid:</b>		00						red (additional colors on request)
<b>I/O port moduls:</b>			0					Without (standard)
			1					Multi-function relay
			2					Power Control Module
<b>Documentation:</b>							DE	German (Standard)
							EN	English
							ES	Spanish
							FR	French
							GR	Greek
							IT	Italian
							CZ	Czech
							PT	Portuguese
							NL	Dutch
							BE	French and Dutch
							DK	Danish
							00	Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>							00	Default Setting VDE-AR-N 4105 (standard)
							0F	Default setting for offgrid operation
							ZZ	Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.

\* with configuration according to VDE-AR-N 4105, limitation of Sac to max. 4600 W.



**Sunny Boy 4000TL (SB 4000TL-21)**

Valid from: as provided in contract

<p><b>SB 4000TL-21</b> (price before options):</p>	x	xx	4	x	-	xx	xx	<p>PV inverter for grid feed-in                  Pac,r/Sac, max 4000 W/ 4000 VA                  transformerless, for reactive power feed-in,                  graphic display, rotary switch for country settings                  SMA Bluetooth® communication interface,                  multistring function, DC connection SUNCLIX,                  incl. Electronic Solar Switch (ESS)</p>
specific price 1)								
<p><b>Communication:</b></p>	0							<p>SMA Bluetooth® (integrated)                  SMA Bluetooth® (integrated) + RS485                  SMA Bluetooth® (integrated) + Webconnect</p>
<p><b>Color of lid:</b></p>		00						<p>red (additional colors on request)</p>
<p><b>I/O port moduls:</b></p>			0	1	2			<p>Without (standard)                  Multi-function relay                  Power Control Module</p>
<p><b>Documentation:</b></p>								<p>DE German (Standard)                  EN English                  ES Spanish                  FR French                  GR Greek                  IT Italian                  CZ Czech                  PT Portuguese                  NL Dutch                  BE French and Dutch                  DK Danish                  00 Language package (DE, EN, ES, FR, IT, PT)</p>
<p><b>Country specific grid settings:</b></p>								<p>00 Default Setting VDE-AR-N 4105 (standard)                  0F Default setting for offgrid operation                  ZZ Grid parameter country settings: customer specification (setting code, if available).</p>

**Comments**

1) Can vary depending on options.



**Sunny Boy 3600TL (SB 3600TL-21)**

Valid from: as provided in contract

<p><b>SB 3600TL-21 (price before options):</b></p>	x	xx	4	x	-	xx	xx	<p>PV inverter for grid feed-in                      Pac,r/Sac; max 3680 W/3680 VA                      transformerless, for reactive power supply,                      graphic display, rotary code switch for country settings                      SMA Bluetooth® communication interface, multi-string function                      DC connection SUNCLIX,                      incl. Electronic Solar Switch (ESS)</p>
specific price 1)								
<p><b>Communication:</b></p>	0							<p>SMA Bluetooth® (integrated)                      SMA Bluetooth® (integrated) + RS485                      SMA Bluetooth® (integrated) + Webconnect</p>
<p><b>Color of lid:</b></p>		00						<p>red (additional colors on request)</p>
<p><b>I/O port moduls:</b></p>			0	1	2			<p>Without (standard)                      Multi-function relay                      Power Control Module</p>
<p><b>Documentation:</b></p>								<p>DE German (Standard)                      EN English                      ES Spanish                      FR French                      GR Greek                      IT Italian                      CZ Czech                      PT Portuguese                      NL Dutch                      BE French and Dutch                      DK Danish                      00 Language package (DE, EN, ES, FR, IT, PT)</p>
<p><b>Country specific grid settings:</b></p>								<p>00 Default Setting VDE-AR-N 4105 (standard)                      0F Default setting for offgrid operation                      ZZ Grid parameter country settings: customer specification (setting code, if available).</p>

**Comments**

1) Can vary depending on options.



### Sunny Boy 3000TL (SB 3000TL-21)

Valid from: as provided in contract

<b>SB 3000TL-21 (price before options):</b>	x	xx	4	x	-	xx	xx	PV inverter for grid feed-in Pac,r/Sac, max 3000 W/ 3000 VA transformerless, for reactive power feed-in, graphic display, rotary switch for country settings SMA Bluetooth® communication interface, multistring function, DC connection SUNCLIX, incl. Electronic Solar Switch (ESS)
specific price 1)								
<b>Communication:</b>	0							SMA Bluetooth® (integrated)
	1							SMA Bluetooth® (integrated) + RS485
	2							SMA Bluetooth® (integrated) + Webconnect
<b>Color of lid:</b>		00						red (additional colors on request)
<b>I/O port moduls:</b>			0					Without (standard)
			1					Multi-function relay
			2					Power Control Module
<b>Documentation:</b>							DE	German (Standard)
							EN	English
							ES	Spanish
							FR	French
							GR	Greek
							IT	Italian
							CZ	Czech
							PT	Portuguese
							NL	Dutch
							BE	French and Dutch
							DK	Danish
							00	Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>							00	Default Setting VDE-AR-N 4105 (standard)
							OF	Default setting for offgrid operation
							ZZ	Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.


**Sunny Boy 3000TL SINGLE TRACKER (SB 3000TLST-21)**

Valid from: as provided in contract

<b>SB 3000TLST-21 (price before options):</b>	x	xx	4	x	x	-	xx	xx	PV inverter for grid feed-in Pac,r/Sac; max 3 000 W/ 3 000 VA transformerless, for reactive power feed-in, graphic display, rotary switch for country settings SMA Bluetooth® communication interface, DC connection SUNCLIX, incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>									
<b>Communication:</b>	0 1 2								SMA Bluetooth® (integrated) SMA Bluetooth® (integrated) + RS485 SMA Bluetooth® (integrated) + Webconnect
<b>Color of lid:</b>		00							red (additional colors on request)
<b>ESS (DC switch):</b>			0 1						Without With (Standard)
<b>I/O port moduls:</b>				0 1 2					Without (standard) Multi-function relay Power Control Module
<b>Documentation:</b>							DE EN ES FR GR IT CZ PT NL BE DK 00		German (Standard) English Spanish French Greek Italian Czech Portuguese Dutch French and Dutch Danish Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>							00 0F ZZ		Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.


**Sunny Boy 2500TL SINGLE TRACKER (SB 2500TLST-21)**

Valid from: as provided in contract

<b>SB 2500TLST-21 (price before options):</b>	x	xx	4	x	x	-	xx	xx	PV inverter for grid feed-in Pac,r/Sac; max 2500 W/ 2500 VA transformerless, for reactive power feed-in, graphic display, rotary switch for country settings SMA Bluetooth® communication interface, DC connection SUNCLIX, incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>									
<b>Communication:</b>	0 1 2								SMA Bluetooth® (integrated) SMA Bluetooth® (integrated) + RS485 SMA Bluetooth® (integrated) + Webconnect
<b>Color of lid:</b>		00							red (additional colors on request)
<b>ESS (DC switch):</b>			0 1						Without With (Standard)
<b>I/O port moduls:</b>				0 1 2					Without (standard) Multi-function relay Power Control Module
<b>Documentation:</b>								DE EN ES FR GR IT CZ PT NL BE DK 00	German (Standard) English Spanish French Greek Italian Czech Portuguese Dutch French and Dutch Danish Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>								00 0F ZZ	Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Boy 2100TL (SB 2100TL)**

Valid from: as provided in contract

<b>SB 2100TL (price before options):</b>	x	0	0	x	4	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 1950 W/2100 VA transformerless, text display, DC SUNCLIX terminal,
specific price 1)										
<b>Communication:</b>	5									without communication interface RS485 SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>ESS (DC switch):</b>					0	1				Without With (Standard)
<b>Documentation:</b>								DE		German
								EN		English
								ES		Spanish
								FR		French
								GR		Greek
								IT		Italian
								CZ		Czech
								NL		Dutch
<b>Country specific grid settings:</b>								DE		Default Setting VDE-AR-N 4105 (standard)
								OF		Default setting for offgrid operation
								ZZ		Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.





**Sunny Boy 1600TL (SB 1600TL-10)**

Valid from: as provided in contract

<b>SB 1600TL-10</b> (price before options):	x	0	0	x	4	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 1600 W/1600 VA transformerless, text display, DC SUNCLIX terminal,
specific price 1)										
<b>Communication:</b>	5									without communication interface RS485 SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>ESS (DC switch):</b>					0	1				Without With (Standard)
<b>Documentation:</b>								DE		German
								EN		English
								ES		Spanish
								FR		French
								GR		Greek
								IT		Italian
								CZ		Czech
								NL		Dutch
<b>Country specific grid settings:</b>								DE		Default Setting VDE-AR-N 4105 (standard)
								OF		Default setting for offgrid operation
								ZZ		Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Boy 1300TL (SB 1300TL-10)**

Valid from: as provided in contract

<p><b>SB 1300TL-10</b> (price before options):</p>	x	0	0	x	4	x	-	xx	xx	<p>PV inverter for grid feed-in Pac,r/Sac; max 1 300 W/ 1 300 W transformerless, text display, DC SUNCLIX terminal</p>
specific price 1)										
<p><b>Communication:</b></p>	5	8	B							<p>without communication interface RS485 SMA Bluetooth®</p>
<p><b>Color of lid:</b></p>			0							<p>red (additional colors on request)</p>
<p><b>ESS (DC switch):</b></p>					0	1				<p>Without With (Standard)</p>
<p><b>Documentation:</b></p>									<p>DE EN ES FR GR IT CZ NL</p>	<p>German English Spanish French Greek Italian Czech Dutch</p>
<p><b>Country specific grid settings:</b></p>									<p>DE OF ZZ</p>	<p>Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).</p>

**Comments**

1) Can vary depending on options.



# Inverters with transformer



**Sunny Mini Central 7000HV (SMC 7000HV-11)**

Valid from: as provided in contract

<b>SMC 7000HV-11</b> (price before options):	x	0	0	x	4	1	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac,max 6650 W/7000 VA galvanically isolated, with reactive power supply text display, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
specific price 1)										
<b>Communication:</b>	5									without communication interface RS485 SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Documentation:</b>									DE EN ES FR GR PT CZ NL	German English Spanish French Greek Portuguese Czech Dutch
<b>Country specific grid settings:</b>									DE OF ZZ	Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Mini Central 6000A (SMC 6000A-11)**

Valid from: as provided in contract

<p><b>SMC 6000A-11</b> (price before options):</p>	x	0	0	x	4	1	-	xx	xx	<p>Solar inverter for grid feed-in Pac,r/Sac, max 6 000 W/6 000 VA galvanically insulated, text display, with reactive power supply, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)</p>
specific price 1)										
<p><b>Communication:</b></p>	5	8	B							<p>without communication interface RS485 SMA Bluetooth®</p>
<p><b>Color of lid:</b></p>			0							<p>red (additional colors on request)</p>
<p><b>Documentation:</b></p>									<p>DE EN ES FR GR PT IT CZ NL</p>	<p>German English Spanish French Greek Portuguese Italian Czech Dutch</p>
<p><b>Country specific grid settings:</b></p>									<p>DE OF ZZ</p>	<p>Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).</p>

**Comments**

1) Can vary depending on options.



**Sunny Mini Central 5000A (SMC 5000A-11)**

Valid from: as provided in contract

<b>SMC 5000A-11 (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 5 000 W/5 500 VA galvanically insulated, text display, with reactive power supply, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
specific price 1)										
<b>Communication:</b>	5	8	B							without communication interface RS485 SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Documentation:</b>									DE EN ES FR GR PT CZ NL	German English Spanish French Greek Portuguese Czech Dutch
<b>Country specific grid settings:</b>									DE OF ZZ	Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Mini Central 4600A (SMC 4600A-11)**

Valid from: as provided in contract

<b>SMC 4600A-11 (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 4600 W/5000 VA* galvanically isolated, text display, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
specific price 1)										
<b>Communication:</b>	5									without communication interface
	8									RS485
	B									SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Documentation:</b>									DE	German
									EN	English
									ES	Spanish
									FR	French
									GR	Greek
									PT	Portuguese
									CZ	Czech
									NL	Dutch
<b>Country specific grid settings:</b>									DE	Default Setting VDE-AR-N 4105 (standard)
									OF	Default setting for offgrid operation
									ZZ	Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.

\* with configuration according to VDE-AR-N 4105, limitation of Sac to max. 4600 W.





**Sunny Boy 3800 (SB 3800-11)**

Valid from: as provided in contract

<p><b>SB 3800-11</b> <b>(price before options):</b></p>	x	0	0	x	4	x	-	xx	xx	<p>Solar inverter for grid feed-in Pac,r/Sac, max 3 800 W/3 800 VA galvanically insulated, text display, with reactive power supply, DC SUNCLIX terminal</p>
specific price 1)										
<p><b>Communication:</b></p>	5	8	B							<p>without communication interface RS485 SMA Bluetooth®</p>
<p><b>Color of lid:</b></p>			0							<p>red (additional colors on request)</p>
<p><b>ESS (DC switch):</b></p>					0	1				<p>Without With (Standard)</p>
<p><b>Documentation:</b></p>									<p>DE EN ES FR GR PT CZ NL</p>	<p>German English Spanish French Greek Portuguese Czech Dutch</p>
<p><b>Country specific grid settings:</b></p>									<p>DE OF ZZ</p>	<p>Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).</p>

**Comments**

1) Can vary depending on options.



**Sunny Boy 3300 (SB 3300-11)**

Valid from: as provided in contract

<p><b>SB 3300-11</b> <b>(price before options):</b></p>	x	0	0	x	4	x	-	xx	xx	<p>PV inverter for grid feed-in Pac,r/Sac, max 3 300 W/3 600 VA galvanically insulated, text display, with reactive power supply, DC connection SUNCLIX</p>
specific price 1)										
<p><b>Communication:</b></p>	5									<p>without communication interface RS485 SMA Bluetooth®</p>
<p><b>Color of lid:</b></p>			0							<p>red (additional colors on request)</p>
<p><b>ESS (DC switch):</b></p>					0	1				<p>Without With (Standard)</p>
<p><b>Documentation:</b></p>									<p>DE EN ES FR GR PT CZ NL</p>	<p>German English Spanish French Greek Portuguese Czech Dutch</p>
<p><b>Country specific grid settings:</b></p>									<p>DE OF ZZ</p>	<p>Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).</p>

**Comments**

1) Can vary depending on options.



## Sunny Boy 3000HF (SB 3000HF-30)

Valid from: as provided in contract

<b>SB 3000HF-30 (price before options):</b>	x	xx	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 3000 W/ 3000 VA galvanically isolated graphic display, rotary switch for country settings SMA Bluetooth® communication interface, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
specific price 1)							
<b>Communication:</b>	0 1						SMA Bluetooth® (integrated) SMA Bluetooth® (integrated) + RS485 and multi-function relay
<b>Color of lid:</b>		00					red (additional colors on request)
<b>Grounding:</b>			0 1 2 3				without grounding kit (standard) with grounding kit, without default setting with grounding kit, negative grounding by default with grounding kit, positive grounding by default
<b>Documentation:</b>					DE EN ES FR GR PT CZ NL 00		German English Spanish French Greek Portuguese Czech Dutch Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>					00 0F ZZ		Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

## Comments

1) Can vary depending on options.



**Sunny Boy 2500HF (SB 2500HF-30)**

Valid from: as provided in contract

<b>SB 2500HF-30 (price before options):</b>	x	xx	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 2500 W/ 2500 VA galvanically isolated graphic display, rotary switch for country settings, SMA Bluetooth® communication interface, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
specific price 1)							
<b>Communication:</b>	0 1						SMA Bluetooth® (integrated) SMA Bluetooth® (integrated) + RS485 and multi-function relay
<b>Color of lid:</b>		00					red (additional colors on request)
<b>Grounding:</b>			0 1 2 3				without grounding kit (standard) with grounding kit, without default setting with grounding kit, negative grounding by default with grounding kit, positive grounding by default
<b>Documentation:</b>					DE EN ES FR GR PT CZ NL 00		German English Spanish French Greek Portuguese Czech Dutch Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>					00 0F ZZ		Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Boy 2000HF (SB 2000HF-30)**

Valid from: as provided in contract

<b>SB 2000HF-30 (price before options):</b>	x	xx	x	-	xx	xx	Solar inverter for grid feed-in Pac,r/Sac, max 2000 W/ 2000 VA galvanically isolated graphic display, rotary switch for country settings SMA Bluetooth® communication interface, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
specific price 1)							
<b>Communication:</b>	0						SMA Bluetooth® (integrated)
	1						SMA Bluetooth® (integrated) + RS485 and multi-function relay
<b>Color of lid:</b>		00					red (additional colors on request)
<b>Grounding:</b>		0					without grounding kit (standard)
		1					with grounding kit, without default setting
		2					with grounding kit, negative grounding by default
		3					with grounding kit, positive grounding by default
<b>Documentation:</b>					DE		German
					EN		English
					ES		Spanish
					FR		French
					GR		Greek
					PT		Portuguese
					CZ		Czech
				NL		Dutch	
				00			Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>					00		Default Setting VDE-AR-N 4105 (standard)
					0F		Default setting for offgrid operation
					ZZ		Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Boy 1200 (SB 1200)**

<b>SB 1200 (price before options):</b>	x	x	4	-	xx	xx	Solar inverter for grid feed-in P <sub>ac,r</sub> /S <sub>ac</sub> , max 1200 W/1200 VA galvanically isolated, text display, DC SUNCLIX terminal, incl. Electronic Solar Switch (ESS)
specific price 1)							
<b>Communication:</b>	5	8	B				without communication interface RS485 SMA Bluetooth®
<b>Color of lid:</b>	0						red (additional colors on request)
<b>Documentation:</b>						DE EN ES FR GR PT CZ NL	German English Spanish French Greek Portuguese Czech Dutch
<b>Country specific grid settings:</b>						DE OF ZZ	Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Sunny Boy/Sunny Mini Central Demo**

**SBX Dummy** Sunny Boy 3300/3800 Demo, no function

**SMCX-Dummy** Sunny Mini Central SMC x000TL, SMC x000A, SMC 7000 HV-11 Demo, no function

<b>SB 3000HF-3Y</b> (price before options):	x	xx	x	Demo device Sunny Boy 2000HF-30, 2500HF-30, 3000HF-30
<b>Device type:</b>	0			Typ: Sunny Boy 2000HF
	1			Typ: Sunny Boy 2500HF
	2			Typ: Sunny Boy 3000HF
<b>Color of lid:</b>		00		red (additional colors on request)
<b>Cabinet:</b>			0	only enclosure with display, no function

<b>SB 5000TL-2Z</b> (price before options):	x	xx	x	Demo device Sunny Boy 3000TL-21, SB 3600TL-21, SB 4000TL-21, SB 5000TL-21, SB 2500TLST-21, SB 3000TLST-21
<b>Device type:</b>	1			Typ: Sunny Boy 3000TL-21
	2			Typ: Sunny Boy 4000TL-21
	3			Typ: Sunny Boy 5000TL-21
	4			Typ: Sunny Boy 3600TL-21
	5			Typ: Sunny Boy 2500TLST-21
	6			Typ: Sunny Boy 3000TLST-21
<b>Color of lid:</b>		00		red (additional colors on request)
<b>Cabinet:</b>			0	only enclosure with display, no function

<b>STP 17000TL-1Y</b> (price before options):	x	xx	x	Demo device STP 8000TL-10, STP 10000TL-10, 12000TL-10, 15000TL-10, 17000TL-10
<b>Device type:</b>	0			Typ: Sunny Tripower 10000TL
	1			Typ: Sunny Tripower 12000TL
	2			Typ: Sunny Tripower 15000TL
	3			Typ: Sunny Tripower 17000TL
	4			Typ: Sunny Tripower 8000TL
<b>Color of lid:</b>		08		Gentian blue (additional colors on request)
<b>Cabinet:</b>			0	only enclosure with display, no function

<b>STP 20000TL-1Y</b> (price before options):	x	x		Demo device STP 20000TLEE-10, STP 15000TLEE-10
<b>Device type:</b>	1			STP15000TLEE-10
	2			STP20000TLEE-10
<b>Color of lid:</b>		08		Gentian blue (additional colors on request)

<b>STP 9000TL-2Y</b> (price before options):	x	xx	x	Demo device STP 5000TL-20, STP 6000TL-20, STP 7000TL-20, STP 8000TL-20, STP 9000TL-20
<b>Device type:</b>	0			Typ: Sunny Tripower 5000TL
	1			Typ: Sunny Tripower 6000TL
	2			Typ: Sunny Tripower 7000TL
	3			Typ: Sunny Tripower 8000TL
	4			Typ: Sunny Tripower 9000TL
<b>Color of lid:</b>		08		Gentian blue (additional colors on request)
<b>Cabinet:</b>			0	only enclosure with display, no function

**Stand system** Stand system for Sunny Boy/Sunny Mini Central Demo



## Communication interfaces

### 485PB-NR

RS485 interface type Piggy-Back as retrofit kit for:  
SB/SWR/WB 700  
SB/SWR/WB 1100 (E) (LV)  
SB 1200  
SB 1300TL-10/1600TL-10  
SB/SWR/WB 1700 (E)  
SWR 2000  
SB 2100TL  
SB/SWR/WB 2500/3000  
SB/WB 2800i  
SB/WB 3300/3800 (-11)  
SB 3300TL/4200TL (HC)  
SB 5000TL (HC) (W)

### 485PB-SMC-NR

RS485 interface type Piggy-Back as retrofit kit for:  
SMC/WB 4600A (-11)  
SMC/WB 5000/6000 (A) (A-11)  
SMC 7000HV (HV-11)  
SMC 6000TL/7000TL/8000TL  
SMC 9000TL-10/10000TL-10/11000TL-10  
SMC 9000TLRP-10/10000TLRP-10/11000TLRP-10

### DM-485CB-10

RS485 interface type data module as retrofit kit for:  
SB 3000TL-20/3600TL-20/4000TL-20/ 5000TL-20  
SB 3000TL-21/3600TL-21/4000TL-21/5000TL-21  
SB 2500TLST-21/3000TLST-21  
STP 8000TL-10/10000TL-10/12000TL-10/  
15000TL-10/17000TL-10  
STP 15000TLEE-10/20000TLEE-10

### 485QM-10-NR

RS485 interface type Quick-Module incl. multi-function relay as retrofit kit for  
SB 2000HF-30/2500HF-30/3000HF-30





<b>BTPBINV-NR (price before options):</b>	xx SMA Bluetooth® interface typ Piggy-Back as upgrade kit for
<b>Device type:</b>	SB/WB 700 SB/WB 1100 (E) (LV) SB 1200 SB 1300TL-10/1600TL-10 SB/WB 1700 (E) SB 2100TL SB/WB 2500/3000 SB/WB 2800i SB/WB 3300/3800 (-11) SB 3300TL/4200TL/5000TL (HC) SMC/WB 4600A (-11) SMC/WB 5000/6000 (A) (A-11) SMC 7000HV (-11) SMC 6000TL/7000TL/8000TL SMC 9000TL-10/10000TL-10/11000TL-10 SMC 9000TLRP-10/10000TLRP-10/11000TLRP-10
<b>Documentation:</b>	AU Australia (Documentation: English) BE Belgium (Documentation: German, Dutch, French) CZ Czech Republic (Documentation: Czech) DE Germany (Documentation: German) ES Spain (Documentation: Spanish) FR France (Documentation: French) GB Great Britain (Documentation: English) GR Greece (documentation: Greek) IT Italy (Documentation: Italian) KR Korea (Documentation: Korean) NL Netherlands (Documentation: Dutch) PT Portugal (Documentation: Portuguese) US USA (Documentation: English)
<b>BTPB-EXTANT-NR (price before options):</b>	xx SMA Bluetooth® interface type Piggy-Back incl. external antenna as retrofit kit for
<b>Device type:</b>	SB/WB 1100 (E) (LV) (IT) WB 1100LV (IT) SB/WB 1200 (IT) SB 1300TL-10/1600TL-10 SB/WB 1700 (IT) SB 2100TL SB/WB 2500 (IT) SB 2500-KR SB/WB 3000 (IT) SB 3000-KR SB/WB 3300 (-11) (-IT) SB/WB 3800 (-11) (-IT) SB 3300TL (HC) (-IT) SMC/WB 4600A (-11) SMC/WB 5000 (A) (A-11) (A-IT) SMC/WB 6000 (A) (A-11) (A-IT) (A-KR) SMC 7000HV (-11) (-IT) SMC 6000TL/7000TL/8000TL (IT) SMC 9000TL-10/10000TL-10/11000TL-10 (IT) SMC 9000TLRP-10/10000TLRP-10/11000TLRP-10
<b>Documentation:</b>	AU Australia (Documentation: English) BE Belgium (Documentation: German, Dutch, French) CZ Czech Republic (Documentation: Czech) DE Germany (Documentation: German) ES Spain (Documentation: Spanish) FR France (Documentation: French) GB Great Britain (Documentation: English) GR Greece (documentation: Greek) IT Italy (Documentation: Italian) KR Korea (Documentation: Korean) NL Netherlands (Documentation: Dutch) PT Portugal (Documentation: Portuguese) US USA (Documentation: English)



<b>ANEXTKIT25-10</b>	Antenna extension add-on kit for SMA Bluetooth® Piggy-Back Plus
<b>SWDM-10</b>	Webconnect interface type data module as retrofit kit for: SB 2500TLST-21/3000TLST-21 SB 3000TL-21/3600TL-21/4000TL-21/5000TL-21 STP 8000TL-10/10000TL-10/12000TL-10/ 15000TL-10/17000TL-10 STP 15000TLEE-10/20000TLEE-10
<b>MFR01-10</b>	Multi-function relay for retrofitting in PV inverters for SB 2500TLST-21/3000TLST-21 SB 3000TL-21/3600TL-21/4000TL-21/5000TL-21 STP 8000TL-10/10000TL-10/12000TL-10/ 15000TL-10/17000TL-10 STP 15000TLEE-10/20000TLEE-10
<b>FANKIT01-10</b>	Additional fan kit for SB 2500TLST-21, SB 3000TLST-21, SB 3000TL-21, SB 3600TL-21, SB 4000TL-21, SB 5000TL-21. For use of inverters in high ambient temperatures.
<b>PWCMOD-10</b>	Power control module for retrofitting of PV inverters SB 2500TLST-21/3000TLST-21 SB 3000TL-21/3600TL-21/4000TL-21/5000TL-21 STP 8000TL-10/10000TL-10/12000TL-10/ 15000TL-10/17000TL-10 STP 15000TLEE-10/20000TLEE-10
<b>PWCBRD-10</b>	Power control module for retrofitting of PV inverters STP 5000TL-20/6000TL-20/7000TL-20/8000TL-20/ 9000TL-20



## Communication socket

**SB-RS485** Plug (2 pc.)/socket combination for RS485 communication incl. Termination resistor (1 termination resistor per bus system) assembly into Sunny Boy inverter free of charge ex works

**SB-RS485-NR** Plug (2 pc.)/socket combination for RS485 communication incl. Termination resistor (1 termination resistor per bus system) upgrade kit as article SB-RS485 for assembly by the customer

## Power Balancer

**PBL-YCABLE-10** Power Balancer connecting cable (2 x 2 m) with SMC 9000TL-10/10000TL-10/11000TL-10/9000TLRP-10/10000TLRP-10/11000TLRP-10

**PBL-SMC-10-NR** Refit set for the modification of a Sunny Mini Central with a SMA Power Balancer to a SMA Power Balancer plug system

## DC Connection

**SUNCLIX-FC6-SET** SUNCLIX field connector for cross-sections from 2.5 to 6 mm<sup>2</sup>, Set (+/-) for 10 strings



## Grounding

### ESHV-P-NR

Refit set for the positive connection to ground of the DC input for  
SB 700  
SB 1100 (LV)  
SB 1200  
SB 1700  
SB 2800i  
SB 2500/3000  
SB 3300/3800 (-11)  
SMC 4600A/5000A/6000A (-11)  
SMC 7000HV (-11)

### ESHV-N-NR

Refit set for the negative connection to ground of the DC input for  
SB 700  
SB 1100 (LV)  
SB 1200  
SB 1700  
SB 2800i  
SB 2500/3000  
SB 3300/3800 (-11)  
SMC 4600A/5000A/6000A (-11)  
SMC 7000HV (-11)

### PLUGIN-GRD-10-NR

SMA Plug-in Grounding as an upgrade kit (Stick) for the positive or negative connection to ground of the DC input for  
SB 2000HF-30/2500HF-30/3000HF-30

### PVO-N-20

PV OFFSET BOX  
External device for automatic application of a reverse voltage at the PV generator.  
For regeneration of PV-panels affected by PID.



**System Components**

<b>GridGate-10</b> (price before options):	0 xx	Central grid and plant protection 3N~ 230/400 V, with display, terminal for 2 relays
<b>Netzparameter</b> <b>Länder-</b> <b>einstellungen:</b>	DE	Default Setting VDE-AR-N 4105 (standard)
<b>GridGate-11</b> (price before options):	0 xx	Central grid and plant protection 3N~ 230/400 V for plants in accordance with CEI 0-21 specifications (Italy), with display, connection for 2 relays, with 2 digital inputs
<b>Netzparameter</b> <b>Länder-</b> <b>einstellungen:</b>	IT	Default Setting CEI 0-21 (standard)



## Protection and fuse elements

<b>FUSEKIT 8A-NR</b>	Refit set with 5 pc. 8 A fuses incl. fuse protection for SMC 9000TL-10/10000TL-10/11000TL-10/9000TLRP-10/10000TLRP-10/11000TLRP-10
<b>FUSEKIT 10A-NR</b>	Refit set with 5 pc. 10 A fuses incl. fuse protection for SMC SMC 9000TL-10/10000TL-10/11000TL-10/9000TLRP-10/10000TLRP-10/11000TLRP-10
<b>FUSEKIT 12A-NR</b>	Refit set with 5 pc. 12 A fuses incl. fuse protection for SMC 9000TL-10/10000TL-10/11000TL-10/9000TLRP-10/10000TLRP-10/11000TLRP-10
<b>FUSEKIT 16A-NR</b>	Refit set with 5 pc. 16 A fuses incl. fuse protection for SMC 9000TL-10/10000TL-10/11000TL-10/9000TLRP-10/10000TLRP-10/11000TLRP-10
<b>FUSEKIT 20A-NR</b>	Refit set with 5 pc. 20 A fuses incl. fuse protection for SMC 9000TL-10/10000TL-10/11000TL-10/9000TLRP-10/10000TLRP-10/11000TLRP-10
<b>DC_SPD_KIT1-10</b>	Upgrade kit DC overvoltage protector (type II) for input A Fits for STP 8000TL-10/1000TL-10/12000TL-10/15000TL-10/17000TL-10
<b>DC_SPD_KIT2-10</b>	Upgrade kit DC overvoltage protector (type II) for input A and B Fits for STP 8000TL-10/1000TL-10/12000TL-10/15000TL-10/17000TL-10



## Service Products

### USBPBS

USB service interface with a 1,5 m cable and a USB port for a PC connection

Not applicable in SB 2000HF-30, SB 2500HF-30, SB 3000HF-30, SB 3000TL-20, SB 3600TL-20, SB 4000TL-20, SB 5000TL-20, SB 3000TL-21, SB 3600TL-21, SB 4000TL-21, SB 5000TL-21, SB 2500TLST-21; SB 3000TLST-21, Sunny Tripower



## Spare parts





## Communication socket

**SB-RS232-NR** Plug/socket combination for RS232 communication upgrade kit as article SB-RS232 for assembly by the customer

**SWR-SK** 12 m data cable for RS232 interface (D-Sub socket 9-pin/ connector sleeves)



## Communication interfaces

### BEAMPB-NR

Radio Piggy-Back for upgrading a Sunny Boy or Sunny Mini Central for communication with Sunny Beam, incl. Antenna, coax cable and metal PG fitting

Installation in a SWR 1500 or SWR 2000 requires the SBEAMPB-ISO-NR. Please order accordingly.

Not applicable in SB 2000HF-30, SB 2500HF-30, SB 3000HF-30, SB 3000TL-20, SB 3600TL-20, SB 4000TL-20, SB 5000TL-20, SB 3000TL-21, SB 3600TL-21, SB 4000TL-21, SB 5000TL-21, SB 2500TLST-21; SB 3000TLST-21, Sunny Tripower

### BEAMPBU-NR

Radio Piggy-Back for upgrading a Sunny Boy or Sunny Mini Central for communication with Sunny Beam, incl. Antenna, coax cable and metal PG fitting. Australian version

Not applicable in SB 2000HF-30, SB 2500HF-30, SB 3000HF-30, SB 3000TL-20, SB 3600TL-20, SB 4000TL-20, SB 5000TL-20, SB 3000TL-21, SB 3600TL-21, SB 4000TL-21, SB 5000TL-21, SB 2500TLST-21; SB 3000TLST-21, Sunny Tripower

## Display Refitting Kit

For inverters shipped from 02/2005 onward:

Please order SWR-Display-NR or SB-Display-NR for display retrofitting (see below)

### SWR-DISPLAY-NR

Spare display board for Sunny Boy SWR inverters

### SB-DISPLAY-NR

Spare display board for Sunny Boys of type SB and SMC



<b>SWR-Display (price before options):</b>	x	x	x	Display lid with 2-line LCD
<b>Device type:</b>	0			for SWR 700
	1			for SWR 850
	2			for SWR 850 E
	3			for SWR 1100 E
	4			for SWR 1500
	5			for SWR 2000
	6			for SWR 2500
	7			for SWR 3000
	8			for SWR 1700
	9			for SWR 1700 E
<b>Color of lid:</b>	0			red
	2			blue
	3			yellow
<b>Default setting:</b>		0		german
		1		english

<b>SB-Display (price before options):</b>	x	x	x	Display lid with 2-line LCD
<b>Device type:</b>	0			for SB 2100 TL
	1			for SB 2500
	2			for SB 3000
	3			for SB 1300TL-10
	4			for SB 1600TL-10
<b>Color of lid:</b>	0			red
	2			blue
	3			yellow
<b>Default setting:</b>		0		german
		1		english
		2		spanish
		3		french

<b>MS-Display (price before options):</b>	x	x		Multi-String display lid with 2-line LCD
<b>Color of lid:</b>	0			red
	2			blue
	3			yellow
<b>Default setting:</b>		0		german
		1		english
		2		spanish
		3		french

<b>ESS-HANDLE</b>	xx			ESS handle replacement part for
<b>Device type:</b>	01			SB 1100/1200/1300TL-10/1600TL-10/1700/2100TL/2500/3000
	02			SB 3300/3800 (-11)
	03			SB 3300TL/4200TL/5000TL HC
	04			SMC 4600A/5000A/6000A (-11)/ SMC 6000TL/7000TL/8000TL/ SMC 7000HV (-11)/ SMC 9000TL-10/10000TL-10/11000TL-10/ SMC 9000TLRP-10/10000TLRP-10/SMC 11000TLRP-10
	05			SB 3000TL-20/3600TL-20/4000TL-20/5000TL-20/ SB 3000TL-21/3600TL-21/4000TL- 21/5000TL-21/ SB 2500TLST-21/3000TLST-21
	06			STP 8000TL-10/10000TL-10/12000TL-10/15000TL-10/17000TL-10
	07			SB 2000HF-30/2500HF-30/3000HF-30
	08			STP 5000TL-20/6000TL-20/7000TL-20/8000TL-20/9000TL-20



When placing an order, please always indicate the serial number of the inverter.



## Grounding

**KLKD-1** Spare fuses for grounding set PLUGIN-GRD-10-NR, 1 A, 600V, 10 pc.

## Miscellaneous

**45-7202** Handle cover set, "right" and "left", as replacement parts for  
SB 3300/3800 (-11)  
SMC 4600A/5000A/6000A (-11)  
SMC 6000TL/7000TL/8000TL  
SMC 7000HV (-11)  
SMC 9000TL-10/10000TL-10/11000TL-10  
SMC 9000TLRP-10/10000TLRP-10/11000TLRP-10  
STP 5000TL-20/6000TL-20/7000TL-20/8000TL-20/9000TL-20

**45-10899080** Handle cover set, "right" and "left", as replacement parts for  
STP 8000TL-10/10000TL-10/12000TL-10/15000TL-10/17000TL-10  
  
STP 15000TLEE-10/20000TLEE-10



## Varistors

<b>SWR-TV 1</b>	Set of thermally monitored varistors (2 pc.) for SWR 700/850
<b>SWR-TV 2</b>	Set of thermally monitored varistors (2 pc.) for SWR 850E SWR 1700
<b>SWR-TV 3</b>	Set of thermally monitored varistors (2 pc.) for SWR 1100E/1700E
<b>SWR-TV 4</b>	Set of thermally monitored varistors (2 pc.) for SWR 1500/2000/2500/3000
<b>SB-TV 1</b>	Set of thermally monitored varistors (2 pc.) for SB 700, incl. insertion tool SB-TVWZ
<b>SB-TV 3</b>	Set of thermally monitored varistors (2 pc.) for SB 1100/1200/1700 incl. insertion tool SB-TVWZ
<b>SB-TV 4</b>	Set of thermally monitored varistors (2 pc.) for SB 1300TL-10/1600TL-10 SB 2100TL SB 2500/3000 SB 2800i SB 3000TL-20 SB 3300/3800 (-11) SMC 4600A/5000A/6000A (-11) incl. insertion tool SB-TVWZ
<b>MSWR-TV 5</b>	Set of thermally monitored varistors (6 pc.) for SB 5000TL (W) incl. insertion tool SB-TVWZ
<b>MSWR-TV 6</b>	Set of thermally monitored varistors (4 pc.) for SB 4200TL SB 4200TL HC/5000TL HC, incl. insertion tool SB-TVWZ
<b>MSWR-TV 7</b>	Set of thermally monitored varistors (2 pc.) for SB 3300TL (HC) SB 2000HF-30/2500HF-30/3000HF-30 SMC 6000TL/7000TL/8000TL SMC 7000HV (-11) SMC 9000TL-10/10000TL-10/11000TL-10 SMC 9000TLRP-10/10000TLRP-10/11000TLRP-10 incl. insertion tool SB-TVWZ
<b>MSWR-TV 8</b>	Set of thermally monitored varistors (3 pc.) for SB 3000TL-20/3600TL-20/4000TL-20/5000TL-20 incl. insertion tool SB-TVWZ
<b>MSWR-TV 9</b>	Set of thermally monitored varistors (3 pc.) for SB 3000TL-21/3600TL-21/4000TL-21/5000TL-21 SB 2500TLST-21/3000TLST-21 incl. insertion tool SB-TVWZ



**STP-TV9** Set of thermally monitored varistors (3 pc.) for  
STP 8000TL-10/10000TL-10/12000TL-10/15000TL-10/17000TL-10  
  
STP 15000TLEE-10/20000TLEE-10

**STP-TV10** Set of thermally monitored varistors (4 pc.) for  
STP 5000TL-20/6000TL-20/7000TL-20/8000TL-20/9000TL-20

**SB-TVWZ** Insertion tool for varistor sets  
  
of types SB-TV1, SB-TV3, SB-TV4, MSWR-TV5, MSWR-TV6, MWSWR-TV7, MSWR-TV8

**STP-TVWZ** Insertion tool for varistor sets  
Typ STP-TV9, MSWR-TV9



### Lids for Sunny Boys / Sunny Mini Centrals / Sunny Tripower

<b>INVERTERLID-01</b>	Lid for SB 700 (U) SB 1100 (klein)
<b>INVERTERLID-02</b>	Lid for SB 1100 (groß) SB 1200/1700 SB 1300TL-10/1600TL-10 SB 2100TL SB 2500/3000
<b>INVERTERLID-03</b>	Lid for SB 3300/3800 (-11) SB 3000US/4000US SB 3800-US-10
<b>INVERTERLID-04</b>	Lid for SB 3300TL/4000TL/5000TL (HC) SB 5000TLW
<b>INVERTERLID-05</b>	Lid for SMC 5000/6000
<b>INVERTERLID-06</b>	Lid for SMC 4600A/5000A/6000A (-11) SMC 6000TL/7000TL/8000TL SMC 7000HV (-11) SMC 9000TL-10/10000TL-10/11000TL-10 SMC 9000TLRP-10/10000TLRP-10/11000TLRP-10 SB 5000US/6000US/7000US/8000US SB 8000TLUS-10/9000TLUS-10/10000TLUS-10
<b>INVERTERLID-07</b>	Lid for SB 2800i
<b>INVERTERLID-08</b>	Lid for SB 3000TL-20/3600TL-20/4000TL-20/5000TL-20
<b>INVERTERLID-09</b>	Lid for Connection area SB 3000TL-20/3600TL-20/3600TL-20/4000TL-20/5000TL-20
<b>INVERTERLID-10</b>	Lid for SB 2000HF-30/2500HF-30/3000HF-30
<b>INVERTERLID-11</b>	Lid for  STP 8000TL-10/10000TL-10/12000TL-10/15000TL-10/17000TL-10
<b>INVERTERLID-12</b>	Lid for Connection area STP 8000TL-10/10000TL-10/12000TL-10/15000TL-10/17000TL-10  STP 15000TLEE-10/20000TLEE-10
<b>INVERTERLID-13</b>	Lid for SB 3000TL-21/3600TL-21/4000TL-21/5000TL-21 SB 2500TLST-21/3000TLST-21
<b>INVERTERLID-14</b>	Lid for Connection area SB 3000TL-21/3600TL-21/4000TL-21/5000TL-21 SB 2500TLST-21/3000TLST-21
<b>INVERTERLID-15</b>	Lid for STP 5000TL-20/6000TL-20/7000TL-20/8000TL-20/9000TL-20
<b>INVERTERLID-16</b>	ESS panel as replacement part for STP 5000TL-20/6000TL-20/7000TL-20/8000TL-20/9000TL-20

# Backup Systems







**Sunny Backup 2200 (SBU 2200)**

Valid from: as provided in contract

<b>SBU 2200 (price before options):</b>	x	x	x	0	x	Backup inverter Sunny Backup 2200, nominal AC power: 2.2 kW, battery voltage: 24 VDC, incl. external battery temperature sensor
<b>Communication:</b>	0					Without communication RS485
<b>User interface:</b>		0				With SRC-20 user interface, SD card, connection cable No Sunny Remote Control (SRC-20) user interface
<b>Battery fuse:</b>			0			With battery fuse (BATFUSE-A. 01) type NH00 with 125 A and 2 x 2 m connection lead (35 mm <sup>2</sup> ) between the fuse and the SBU 2200 No battery fuse (BATFUSE-A. 01)
<b>Language:</b>						DE German EN English GR Greek



**NOTICE!**  
The SBU 2200 can only be operated with an AS-Box

**Sunny Backup 5000 (SBU 5000)**

Valid from: as provided in contract

<b>SBU 5000 (price before options):</b>	x	0	x			Backup inverter Sunny Backup 5000, nominal AC power: 5.0 kW, battery voltage: 48 VDC, incl. external battery temperature sensor
<b>Communication:</b>	0					Without communication RS485
<b>Language:</b>						DE German EN English GR Greek



**NOTICE!**  
The SBU 5000 can only be operated with an AS-Box



### Sunny Backup Demo

<b>SBU-2200Dummy</b>	Sunny Backup 2200 Demo, no function
<b>SBU-5000Dummy</b>	Sunny Backup 5000 Demo, no function
<b>Stand system</b>	Stand system for Sunny Backup Demo

### Battery

Valid from: as provided in contract

<b>SBU-BAT.24-140 (price before options):</b>	x	x	0	Sunny Backup battery for SBU 2200 (24 V, 142 Ah, 3,4 kWh),sealed, maintenance-free AGM battery,type power.com SB, 2 blocks with 12 V each
<b>Battery connection:</b>	0			Battery connection cable 2 x 2 m, 35 mm <sup>2</sup> with crimped cable shoes for connection of the battery with battery fuse
<b>Rack:</b>	0	1		Without rack With steel rack



The SBU-Bat24-140 battery should only be used in purely backup systems (systems for emergency power supply). Cycle-resistant batteries (e.g. OPzV batteries) should be used to increase self-consumption in conjunction with the Sunny Backup system.

Valid from: as provided in contract

<b>SBU-BAT.48-140 (price before options):</b>	x	x	0	Sunny Backup battery for SBU 5000 (48 V, 142 Ah 6.8 kWh),sealed, maintenance-free AGM battery, type power.com SB, 4 blocks with 12 V each
<b>Battery connection:</b>	1			Battery connection cable 2 x 3 m, 70 mm <sup>2</sup> ,double insulation, with crimped cable shoes
	2			Battery connection cable 2 x 6 m, 70 mm <sup>2</sup> ,double insulation, with crimped cable shoes
	3			Battery connection cable 2 x 9 m, 70 mm <sup>2</sup> ,double insulation, with crimped cable shoes
<b>Rack:</b>	0	1		Without rack With steel rack



The SBU-Bat48-140 battery should only be used in purely backup systems (systems for emergency power supply). Cycle-resistant batteries (e.g. OPzV batteries) should be used to increase self-consumption in conjunction with the Sunny Backup system.



**Switching unit/automatic switch box for TT and TN grids**

Valid from: as provided in contract

<p><b>AS-BOX-M-20</b> (price before options):</p>	1	0	x	x	<p>1-phase automatic switching unit AS-BOX M-20 for TT and TN grounding systems, consumer power 7.4 kW / 32 A, PV power 5.7 kW / 25 A, connection for 1 SBU 5000, PV array connection 7.4 kW / 32 A, incl. 1 x 5 m synchronization cable, incl. 1 x 5 m communication cable from SBU 5000 to AS-BOX</p>
<p><b>Documentation:</b></p>				<p>DE EN GR</p>	<p>German English Greek</p>
<p><b>Voltage range</b></p>				<p>0 1</p>	<p>0 Voltage: 220 V/ 230 V (187 V to 253 V) 1 Voltage: 230 V/ 240 V (195,5 V to 260 V)</p>

Valid from: as provided in contract

<p><b>AS-BOX-L-20</b> (price before options):</p>	1	0	x	x	<p>3-phase automatic switching unit AS-BOX L-20 for TT and TN grounding systems, consumer power 35 kW / 3 x 50 A, PV power 28 kW / 3 x 40 A, connection for 3 SBU 5000, PV array connection 28 kW / 3 x 40 A, incl. 1 x 5 m synchronization cable, incl. 3 x 5 m communication cable from SBU 5000 to AS-BOX</p>
<p><b>Documentation:</b></p>				<p>DE EN GR</p>	<p>German English Greek</p>
<p><b>Voltage range</b></p>				<p>0 1</p>	<p>0 Voltage: 220 V/ 230 V (187 V to 253 V) 1 Voltage: 230 V/ 240 V (195,5 V to 260 V)</p>



**Switching unit/automatic switch box for TN grids only**

Valid from: as provided in contract

<p><b>AS-BOX-S.1</b> <b>(price before options):</b></p>	<p>0 0</p>	<p>1-phase automatic switching unit AS-BOX S.1 only for TN grounding systems, consumer power 5.8 kW / 25 A, PV power 4.6 kW / 20 A, connection for 1 SBU 2200, incl. 2 x 5 m communication cable from SBU 2200 to AS-BOX-S</p>
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## Sunny Backup Systems



### Sunny Backup Systems for use in TT and TN grids

A typical Sunny Backup System M for TT and TN grids is made up of the following components:

- 1 x Battery inverter Sunny Backup 5000,  
Order code example: SBU 5000:00DE
- 1 x Switching unit AS-Box M-20 for TT and TN grounding systems (with PV array connection),  
Order code example: AS-Box M-20: 10DE0
- 1 x Sunny Backup battery incl. battery connection cable,  
order code example: SBU-BAT48-140:100

The total price for system M as specified above for TT and TN grids is



*The order codes given above are only examples. The ultimate order code will be specified via the configuration of the individual products (e.g. Sunny Backup 5000 or AS box-M-20)*

A typical Sunny Backup System L for TT and TN grids is made up of the following components:

- 3 x Battery inverter Sunny Backup 5000,  
Order code example: SBU 5000:00DE
- 1 x Switching unit AS-Box L-20 for TT and TN grounding systems (with PV array connection),  
Order code example: AS-Box L-20: 10DE0
- 2 x Sunny Backup battery incl. battery connection cable,  
order code example: SBU-BAT48-140:100
- 1 x DC distributor SBU-CON.33 incl. DC cable,  
Order code example: SBU-CON.33: 20

The total price for system L as specified above for TT and TN grids is



*The order codes given above are only examples. The ultimate order code will be specified via the configuration of the individual products (e.g. Sunny Backup 5000 or AS box L-20)*



## Sunny Backup Accessories



**Sunny Backup Accessories**

Valid from: as provided in contract

<b>SBU-MeterBox (price before options):</b>	x	0	Meterbox for Sunny Backup, interface for the reading out of eHZ meters, 1 x 3 m communication cable, plug-in power supply
	<hr/>		
<b>Meter readout head:</b>	0	With 2 x readout heads for D0 interface with 0.5 m cable, adaptor for top-hat rail, 2 x 1.5 m communication cable	
	1	Without meter readout heads	

Valid from: as provided in contract

<b>SBU-CON.33 (price before options):</b>	x	0	SBU-CON.33, Sunny Backup DC distribution board for the connection of up to 3 Sunny Backup batteries and up to 3 x SBU 5000
	<hr/>		
<b>Connection:</b>	0	No connection cable	
	1	Connection cable 2 x 3 m, 70mm <sup>2</sup> , double insulation, with crimped cable shoes for connection of 1 x SBU 5000	
	2	Connection cable 6 x 3 m, 70mm <sup>2</sup> , double insulation, with crimped cable shoes for connection of 3 x SBU 5000	



**BATFUSE-A.01**

Valid from: as provided in contract

<b>BATFUSE-A.01 (price before options):</b>	x xx	2-pole NH00 battery fuse for 1 Sunny Island or Sunny Backup, 2 DC inputs (2 x battery or 1 x battery and 1 x Sunny Island Charger)
<b>Fuse value:</b>	0	2 x 125 A fuse plug for Sunny Island 2224, Sunny Backup 2200 with 2 spare fuses
<b>Dokumentation:</b>	01 02	01 German, English, Spanish 02 French, Italian, Greek

**SRC-20**

Control unit Sunny Remote Control for SBU 2200,incl. 128 MB SD card and display cable

**MC-PB**

Multiclustet Piggy-Back for SBU 5000,CAN and RS485-Bus on one Piggy-Back,incl. 2 x 5 m CAN communication cable

**BAT-TEMP-SENSOR**

Spare battery temperature sensor type KTY with 10 m connection cable, for Sunny Island and Sunny Backup

<b>BTPBOG-10 (price before options):</b>	xx	SMA Bluetooth® interface typ Piggy-Back as upgrade kit for
<b>Device type:</b>		SBU 2200
<b>Documentation:</b>	DE	Germany (Documentation: German)



# Central inverters CP XT



**Sunny Central 900CP XT (SC-900CP-10-B5)**

Valid from: as provided in contract

<p><b>SC-900CP-10-B5</b> (price before options):</p>	0	0	0	0	1	0	x	xx	xx	2	2	9	0	0	<p>Self-commutated 900 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, standard DC input voltage range up to 1000V, system-integrated all-pole DC main distribution with up to 9 fuse inputs, insulation monitoring, display, power-operated DC switch-disconnector, AC contactor and AC circuit breaker, string current monitoring, overvoltage protection for DC side, comprehensive grid management functions (incl. LVRT). Connection for external electricity supply. Planned for connection to an external transformer.</p>
<p>specific price 1)</p>															
<p><b>Communication interface</b></p>								2							SC-COM + LWL
								3							SC-COM
<p><b>Language:</b></p>								DE							German
								EN							English
								ES							Spanish
								KR							Korean
								IT							Italian
								FR							French
								CN							Chinese
								CZ							Czech
								GR							Greek
								PT							Portuguese
								NL							Dutch
								RO							Romanian
								JP							Japanese
								DE							Germany
								EN							England
								ES							Spain
								KR							Korea
								IT							Italy
								FR							France
								CN							China
								CZ							Czech/Czech Republic
								GR							Greek/Greece
								PT							Portuguese/Portugal
								NL							Dutch/Netherlands
								RO							Romanian/Romania
								JP							Japanese/Japan
								US							USA
								5H							Standard 50 Hz
								6H							Standard 60 Hz

**Comments**

1) Can differ depending on options.



**Sunny Central 850CP XT (SC-850CP-10-B5)**

Valid from: as provided in contract

<p><b>SC-850CP-10-B5</b> (price before options):</p>	0	0	0	0	1	0	x	xx	xx	2	2	8	0	0	<p>Self-commutated 850 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, standard DC input voltage range up to 1000 V, system-integrated all-pole DC main distribution with up to 9 fuse inputs, insulation monitoring, display, power-operated DC switch-disconnector, AC contactor and AC circuit breaker, string current monitoring, overvoltage protection for the DC side, comprehensive grid management functions (incl. LVRT). Connection for external electricity supply. Planned for connection to an external transformer.</p>							
<p>specific price 1)</p>																						
<p><b>Communication interface</b></p>								2							SC-COM + LWL							
<p><b>Language:</b></p>								3							SC-COM							
<p><b>Country of destination:</b></p>								DE							German							
															EN							English
															ES							Spanish
															KR							Korean
															IT							Italian
															FR							French
															CN							Chinese
															CZ							Czech
															GR							Greek
															PT							Portuguese
															NL							Dutch
															RO							Romanian
															JP							Japanese
															DE							Germany
															EN							England
															ES							Spain
															KR							Korea
															IT							Italy
															FR							France
															CN							China
															CZ							Czech/Czech Republic
															GR							Greek/Greece
															PT							Portuguese/Portugal
															NL							Dutch/Netherlands
															RO							Romanian/Romania
															JP							Japanese/Japan
															US							USA
															5H							Standard 50 Hz
															6H							Standard 60 Hz

**Comments**

1) Can differ depending on options.



**Sunny Central 800CP XT (SC-800CP-10-BS)**

Valid from: as provided in contract

<p><b>SC-800CP-10-BS</b> <b>(Basispreis):</b></p>	0	0	0	0	1	0	x	xx	xx	2	2	0	0	0	<p>Self-commutated 800 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, standard DC input voltage range up to 1000 V, system-integrated all-pole DC main distribution with up to 9 fuse inputs, insulation monitoring, display, power-operated DC switch-disconnector, AC contactor and AC circuit breaker, string current monitoring, overvoltage protection for the DC side, comprehensive grid management functions (incl. LVRT). Connection for external electricity supply. Planned for connection to an external transformer.</p>							
<p>specific price 1)</p>																						
<p><b>Communication interface</b></p>								2							SC-COM + LWL							
<p><b>Language:</b></p>								3							SC-COM							
<p><b>Country of destination:</b></p>								DE							German							
															EN							English
															ES							Spanish
															KR							Korean
															IT							Italian
															FR							French
															CN							Chinese
															CZ							Czech
															GR							Greek
															PT							Portuguese
															NL							Dutch
															RO							Romanian
															JP							Japanese
															DE							Germany
															EN							England
															ES							Spain
															KR							Korea
															IT							Italy
															FR							France
															CN							China
															CZ							Czech/Czech Republic
															GR							Greek/Greece
															PT							Portuguese/Portugal
															NL							Dutch/Netherlands
															RO							Romanian/Romania
															JP							Japanese/Japan
															US							USA
															5H							Standard 50 Hz
															6H							Standard 60 Hz

**Comments**

1) Can differ depending on options.



**Sunny Central 760CP XT (SC-760CP-10-BS)**

Valid from: as provided in contract

<p><b>SC-760CP-10-BS</b> <b>(Basispreis):</b></p>	0	0	0	0	1	0	x	xx	xx	2	2	2	0	0	<p>Self-commutated 760 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, standard DC input voltage range up to 1000 V, system-integrated all-pole DC main distribution with up to 9 fuse inputs, insulation monitoring, display, power-operated DC switch-disconnector, AC contactor and AC circuit breaker, string current monitoring, overvoltage protection for the DC side, comprehensive grid management functions (incl. LVRT). Connection for external electricity supply. Planned for connection to an external transformer.</p>
<p>specific price 1)</p>															
<p><b>Communication interface</b></p>								2							SC-COM + LWL
<p><b>Language:</b></p>								3							SC-COM
<p><b>Country of destination:</b></p>								DE							German
								EN							English
								ES							Spanish
								KR							Korean
								IT							Italian
								FR							French
								CN							Chinese
								CZ							Czech
								GR							Greek
								PT							Portuguese
								NL							Dutch
								RO							Romanian
								JP							Japanese
								DE							Germany
								EN							England
								ES							Spain
								KR							Korea
								IT							Italy
								FR							France
								CN							China
								CZ							Czech/Czech Republic
								GR							Greek/Greece
								PT							Portuguese/Portugal
								NL							Dutch/Netherlands
								RO							Romanian/Romania
								JP							Japanese/Japan
								US							USA
								5H							Standard 50 Hz
								6H							Standard 60 Hz

**Comments**

1) Can differ depending on options.



**Sunny Central 720CP XT (SC-720CP-10-BS)**

Valid from: as provided in contract

<p><b>SC-720CP-10-BS (Basispreis):</b></p>	0	0	0	0	1	0	x	xx	xx	2	2	4	0	0	<p>Self-commutated 720 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, standard DC input voltage range up to 1000 V, system-integrated all-pole DC main distribution with up to 9 fuse inputs, insulation monitoring, display, power-operated DC switch-disconnector, AC contactor and AC circuit breaker, string current monitoring, overvoltage protection for the DC side, comprehensive grid management functions (incl. LVRT). Connection for external electricity supply. Planned for connection to an external transformer.</p>							
<p>specific price 1)</p>																						
<p><b>Communication interface</b></p>								2							SC-COM + LWL							
<p><b>Language:</b></p>								3							SC-COM							
<p><b>Country of destination:</b></p>								DE							German							
															EN							English
															ES							Spanish
															KR							Korean
															IT							Italian
															FR							French
															CN							Chinese
															CZ							Czech
															GR							Greek
															PT							Portuguese
															NL							Dutch
															RO							Romanian
															JP							Japanese
															DE							Germany
															EN							England
															ES							Spain
															KR							Korea
															IT							Italy
															FR							France
															CN							China
															CZ							Czech/Czech Republic
															GR							Greek/Greece
															PT							Portuguese/Portugal
															NL							Dutch/Netherlands
															RO							Romanian/Romania
															JP							Japanese/Japan
															US							USA
															5H							Standard 50 Hz
															6H							Standard 60 Hz

**Comments**

1) Can differ depending on options.



**Sunny Central 630CP XT (SC-630CP-10-BS)**

Valid from: as provided in contract

<p><b>SC-630CP-10-BS</b> <b>(Basispreis):</b></p>	0	0	0	0	1	0	x	xx	xx	2	2	5	0	0	<p>Self-commutated 630 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, standard DC input voltage range up to 1000 V, system-integrated all-pole DC main distribution with up to 9 fuse inputs, insulation monitoring, display, power-operated DC switch-disconnector, AC contactor and AC circuit breaker, string current monitoring, overvoltage protection for the DC side, comprehensive grid management functions (incl. LVRT). Connection for external electricity supply. Planned for connection to an external transformer.</p>
<p>specific price 1)</p>															
<p><b>Communication interface</b></p>							2								<p>SC-COM + LWL SC-COM</p>
<p><b>Language:</b></p>							DE	EN	ES	KR	IT	FR	CN	CZ	<p>German English Spanish Korean Italian French Chinese Czech Greek Portuguese Dutch Romanian Japanese</p>
<p><b>Country of destination:</b></p>							DE	EN	ES	KR	IT	FR	CN	CZ	<p>Germany England Spain Korea Italy France China Czech/Czech Republic Greek/Greece Portuguese/Portugal Dutch/Netherlands Romanian/Romania Japanese/Japan USA Standard 50 Hz Standard 60 Hz</p>

**Comments**

1) Can differ depending on options.





**Sunny Central 500CP XT (SC-500CP-10-BS)**

Valid from: as provided in contract

<p><b>SC-500CP-10-BS</b> <b>(Basispreis):</b></p>	0	0	0	0	1	0	x	xx	xx	2	2	6	0	0	<p>Self-commutated 500 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, standard DC input voltage range up to 1000 V, system-integrated all-pole DC main distribution with up to 9 fuse inputs, insulation monitoring, display, power-operated DC switch-disconnector, AC contactor and AC circuit breaker, string current monitoring, overvoltage protection for the DC side, comprehensive grid management functions (incl. LVRT). Connection for external electricity supply. Planned for connection to an external transformer.</p>
<p>specific price 1)</p>															
<p><b>Communication interface</b></p>								2							SC-COM + LWL
<p><b>Language:</b></p>								3							SC-COM
<p><b>Country of destination:</b></p>								DE							German
								EN							English
								ES							Spanish
								KR							Korean
								IT							Italian
								FR							French
								CN							Chinese
								CZ							Czech
								GR							Greek
								PT							Portuguese
								NL							Dutch
								RO							Romanian
								JP							Japanese
								DE							Germany
								EN							England
								ES							Spain
								KR							Korea
								IT							Italy
								FR							France
								CN							China
								CZ							Czech/Czech Republic
								GR							Greek/Greece
								PT							Portuguese/Portugal
								NL							Dutch/Netherlands
								RO							Romanian/Romania
								JP							Japanese/Japan
								US							USA
								5H							Standard 50 Hz
								6H							Standard 60 Hz

**Comments**

1) Can differ depending on options.



Sunny Central 900CP XT (SC-900CP-10)

Valid from: as provided in contract

<b>SC-900CP-10 (price before options):</b>	x	x	x	x	x	0	x	xx	xx	x	x	x	x	x	x	<p>Self-commutated 900 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, DC input voltage up to 1000V as standard, system-integrated DC main distribution with up to 9 inputs, motor-driven DC switch-disconnector, AC contactor and AC circuit breaker, overvoltage protection on the DC side, comprehensive power distribution grid management functions (incl. LVRT). Connection for external electricity supply. Intended for connection to an external transformer.</p>
<b>specific price 1)</b>																
<b>Max. DC-Voltage:</b>	0															1000 V
<b>DC connection:</b>	0															Fuses on all poles
	1															Fuses in plus, isolating blades in minus
	2															Fuses in minus, isolating blades in plus
	4															Bus bar
	5															For Optiprotect
<b>DC fuses:</b>	0															Without
	1															200 A (9 per pole)
	2															250 A (9 per pole)
	3															315 A (7 per pole)
	4															400 A (6 per pole)
	5															125 A (9 pcs. per pole)
6															160 A (9 pcs. per pole)	
<b>Grounding:</b>	0															Without
	1															GFDI minus grounding
	2															Remote GFDI minus grounding
	3															GFDI plus grounding
	4															Remote GFDI plus grounding
	5															Soft grounding plus
	6															Soft grounding minus
	7															Remote soft grounding plus
8															Remote soft grounding minus	
<b>Insulation monitoring:</b>	0															none
	1															Yes
	2															Yes, with grounding
<b>Communication interface</b>	2															SC-COM + LWL
	3															SC-COM
<b>Language:/Country of destination:</b>									DE	DE						German/Germany
									EN	EN						English/England
									ES	ES						Spanish/Spain
									KR	KR						Korean/Korea
									IT	IT						Italian/Italy
									FR	FR						French/France
									CN	CN						Chinese/China
									CZ	CZ						Czech/Czech Republic
									GR	GR						Greek/Greece
									PT	PT						Portuguese/Portugal
									NL	NL						Dutch/Netherlands
									RO	RO						Romanian/Romania
								JP	JP						Japanese/Japan	
								-	US						USA	
									5H						Standard 50 Hz	
									6H						Standard 60 Hz	
<b>AC switch:</b>														2		Circuit breaker
														3		Without
<b>String current monitoring:</b>															0	none
															1	yes, 2 hubs
															2	yes, 3 hubs
															3	Optiprotect 32/16
															4	Optiprotect 16/16
															5	Optiprotect 24/12
														6	Optiprotect 12/12	
<b>AC voltage:</b>														9		405 V (900 kVA)
<b>Cabinet layout:</b>															0	Standard
															2	For station installation
<b>Additional functions:</b>															0	none
															1	PID
															2	IEEE 1547

**Comments**

1) Can differ depending on options.



**Sunny Central 850CP XT (SC-850CP-10)**

Valid from: as provided in contract

<b>SC-850CP-10 (price before options):</b>	x	x	x	x	x	0	x	xx	xx	x	x	x	x	x	x	<p>Self-commutated 850 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, DC input voltage up to 1000V as standard, system-integrated DC main distribution with up to 9 inputs, motor-driven DC switch-disconnector, AC contactor and AC circuit breaker, overvoltage protection on the DC side, comprehensive power distribution grid management functions (incl. LVRT). Connection for external electricity supply. Intended for connection to an external transformer.</p>
<b>specific price 1)</b>																
<b>Max. DC-Voltage:</b>	0															1000 V
<b>DC connection:</b>	0															Fuses on all poles
	1															Fuses in plus, isolating blades in minus
	2															Fuses in minus, isolating blades in plus
	4															Bus bar
	5															For Optiprotect
<b>DC fuses:</b>	0															Without
	1															200 A (9 per pole)
	2															250 A (9 per pole)
	3															315 A (7 per pole)
	4															400 A (6 per pole)
	5															125 A (9 pcs. per pole)
6															160 A (9 pcs. per pole)	
<b>Grounding:</b>	0															Without
	1															GFDI minus grounding
	2															Remote GFDI minus grounding
	3															GFDI plus grounding
	4															Remote GFDI plus grounding
	5															Soft grounding plus
	6															Soft grounding minus
	7															Remote soft grounding plus
8															Remote soft grounding minus	
<b>Insulation monitoring:</b>	0															none
	1															Yes
	2															Yes, with grounding
<b>Communication interface</b>	2															SC-COM + LWL
	3															SC-COM
<b>Language:/Country of destination:</b>																DE DE
																EN EN
																ES ES
																KR KR
																IT IT
																FR FR
																CN CN
																CZ CZ
																GR GR
																PT PT
																NL NL
																RO RO
															JP JP	
															- US	
															5H	
															6H	
<b>AC switch:</b>																2
																3
<b>String current monitoring:</b>																0
																1
																2
																3
																4
																5
															6	
<b>AC voltage:</b>																8
<b>Cabinet layout:</b>																0
																2
<b>Additional functions:</b>																0
																1
																2

**Comments**  
1) Can differ depending on options.



**Sunny Central 800CP XT (SC-800CP-10)**

Valid from: as provided in contract

<b>SC-800CP-10 (price before options):</b>	x	x	x	x	x	0	x	xx	xx	x	x	x	x	x	x		Self-commutated 800 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, DC input voltage up to 1000V as standard, system-integrated DC main distribution with up to 9 inputs, motor-driven DC switch-disconnector, AC contactor and AC circuit breaker, overvoltage protection on the DC side, comprehensive power distribution grid management functions (incl. LVRT). Connection for external electricity supply. Intended for connection to an external transformer.
<b>specific price 1)</b>																	
<b>Max. DC-Voltage:</b>	0																1000 V
<b>DC connection:</b>	0																Fuses on all poles
	1																Fuses in plus, isolating blades in minus
	2																Fuses in minus, isolating blades in plus
	4																Bus bar
	5																For Optiprotect
<b>DC fuses:</b>	0																Without
	1																200 A (9 per pole)
	2																250 A (9 per pole)
	3																315 A (7 per pole)
	4																400 A (6 per pole)
	5																125 A (9 pcs. per pole)
<b>Grounding:</b>	6																160 A (9 pcs. per pole)
	0																Without
	1																GFDI minus grounding
	2																Remote GFDI minus grounding
	3																GFDI plus grounding
	4																Remote GFDI plus grounding
<b>Insulation monitoring:</b>	5																Soft grounding plus
	6																Soft grounding minus
	7																Remote soft grounding plus
	8																Remote soft grounding minus
<b>Communication interface</b>	0																none
	1																Yes
	2																Yes, with grounding
<b>Language:/Country of destination:</b>	3																SC-COM + LWL
																	SC-COM
																	German/Germany
<b>AC switch:</b>																	English/England
																	Spanish/Spain
																	Korean/Korea
																	Italian/Italy
																	French/France
																	Chinese/China
																	Czech/Czech Republic
																	Greek/Greece
																	Portuguese/Portugal
																	Dutch/Netherlands
																	Romanian/Romania
																	Japanese/Japan
																	USA
																	Standard 50 Hz
																Standard 60 Hz	
<b>String current monitoring:</b>																	Circuit breaker
																	Without
																	none
																	yes, 2 hubs
																	yes, 3 hubs
																	Optiprotect 32/16
<b>AC voltage:</b>																	Optiprotect 16/16
																	Optiprotect 24/12
																	Optiprotect 12/12
																	360 V (800 kVA)
<b>Cabinet layout:</b>																	Standard
																	For station installation
<b>Additional functions:</b>																	none
																	PID
																	IEEE 1547

**Comments**  
1) Can differ depending on options.



**Sunny Central 760CP XT (SC-760CP-10)**

Valid from: as provided in contract

<b>SC-760CP-10 (price before options):</b>	x	x	x	x	x	0	x	xx	xx	x	x	x	x	x	x		Self-commutated 760 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, DC input voltage up to 1000V as standard, system-integrated DC main distribution with up to 9 inputs, motor-driven DC switch-disconnector, AC contactor and AC circuit breaker, overvoltage protection on the DC side, comprehensive power distribution grid management functions (incl. LVRT). Connection for external electricity supply. Intended for connection to an external transformer.	
<b>specific price 1)</b>																		
<b>Max. DC-Voltage:</b>	0																	1000 V
<b>DC connection:</b>	0																	Fuses on all poles
	1																	Fuses in plus, isolating blades in minus
	2																	Fuses in minus, isolating blades in plus
	4																	Bus bar
	5																	For Optiprotect
<b>DC fuses:</b>	0																	Without
	1																	200 A (9 per pole)
	2																	250 A (9 per pole)
	3																	315 A (7 per pole)
	4																	400 A (6 per pole)
	5																	125 A (9 pcs. per pole)
	6																160 A (9 pcs. per pole)	
<b>Grounding:</b>	0																	Without
	1																	GFDI minus grounding
	2																	Remote GFDI minus grounding
	3																	GFDI plus grounding
	4																	Remote GFDI plus grounding
	5																	Soft grounding plus
	6																	Soft grounding minus
	7																	Remote soft grounding plus
8																	Remote soft grounding minus	
<b>Insulation monitoring:</b>	0																	none
	1																	Yes
	2																	Yes, with grounding
<b>Communication interface</b>	2																	SC-COM + LWL
	3																	SC-COM
<b>Language:/Country of destination:</b>																		DE DE German/Germany
																		EN EN English/England
																		ES ES Spanish/Spain
																		KR KR Korean/Korea
																		IT IT Italian/Italy
																		FR FR French/France
																		CN CN Chinese/China
																		CZ CZ Czech/Czech Republic
																		GR GR Greek/Greece
																		PT PT Portuguese/Portugal
																		NL NL Dutch/Netherlands
																		RO RO Romanian/Romania
																		JP JP Japanese/Japan
																		- US USA
																	5H Standard 50 Hz	
																	6H Standard 60 Hz	
<b>AC switch:</b>	2																	Circuit breaker
	3																	Without
<b>String current monitoring:</b>	0																	none
	1																	yes, 2 hubs
	2																	yes, 3 hubs
	3																	Optiprotect 32/16
	4																	Optiprotect 16/16
	5																	Optiprotect 24/12
6																	Optiprotect 12/12	
<b>AC voltage:</b>																2	342 V (760 kVA)	
<b>Cabinet layout:</b>	0																	Standard
	2																	For station installation
<b>Additional functions:</b>	0																	none
	1																	PID
	2																	IEEE 1547

**Comments**

1) Can differ depending on options.



**Sunny Central 720CP XT (SC-720CP-10)**

Valid from: as provided in contract

<b>SC-720CP-10 (price before options):</b>	x	x	x	x	x	0	x	xx	xx	x	x	x	x			Self-commutated 720 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, DC input voltage up to 1000V as standard, system-integrated DC main distribution with up to 9 inputs, motor-driven DC switch-disconnector, AC contactor and AC circuit breaker, overvoltage protection on the DC side, comprehensive power distribution grid management functions (incl. LVRT). Connection for external electricity supply. Intended for connection to an external transformer.	
<i>specific price 1)</i>																	
<b>Max. DC-Voltage:</b>	0															1000 V	
<b>DC connection:</b>	0															Fuses on all poles	
	1															Fuses in plus, isolating blades in minus	
	2															Fuses in minus, isolating blades in plus	
	4															Bus bar	
	5															For Optiprotect	
<b>DC fuses:</b>	0															Without	
	1															200 A (9 per pole)	
	2															250 A (9 per pole)	
	3															315 A (7 per pole)	
	4															400 A (6 per pole)	
	5															125 A (9 pcs. per pole)	
6															160 A (9 pcs. per pole)		
<b>Grounding:</b>	0															Without	
	1															GFDI minus grounding	
	2															Remote GFDI minus grounding	
	3															GFDI plus grounding	
	4															Remote GFDI plus grounding	
	5															Soft grounding plus	
	6															Soft grounding minus	
	7															Remote soft grounding plus	
8															Remote soft grounding minus		
<b>Insulation monitoring:</b>	0															none	
	1															Yes	
	2															Yes, with grounding	
<b>Communication interface</b>																SC-COM + LWL	
																SC-COM	
<b>Language:/Country of destination:</b>								DE	DE							German/Germany	
								EN	EN							English/England	
								ES	ES							Spanish/Spain	
								KR	KR							Korean/Korea	
								IT	IT							Italian/Italy	
								FR	FR							French/France	
								CN	CN							Chinese/China	
								CZ	CZ							Czech/Czech Republic	
								GR	GR							Greek/Greece	
								PT	PT							Portuguese/Portugal	
								NL	NL							Dutch/Netherlands	
								RO	RO							Romanian/Romania	
								JP	JP							Japanese/Japan	
								-	US							USA	
									5H							Standard 50 Hz	
									6H							Standard 60 Hz	
<b>AC switch:</b>																Circuit breaker	
																Without	
<b>String current monitoring:</b>	0															none	
	1															yes, 2 hubs	
	2															yes, 3 hubs	
	3															Optiprotect 32/16	
	4															Optiprotect 16/16	
	5															Optiprotect 24/12	
6															Optiprotect 12/12		
<b>AC voltage:</b>															4	324 V (720 kVA)	
<b>Cabinet layout:</b>																0	Standard
																2	For station installation
<b>Additional functions:</b>																0	none
																1	PID
																2	IEEE 1547

**Comments**  
1) Can differ depending on options.



**Sunny Central 630CP XT (SC-630CP-10)**

Valid from: as provided in contract

<b>SC-630CP-10 (price before options):</b>	x	x	x	x	x	0	x	xx	xx	x	x	x	x	x									Self-commutated 630 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, DC input voltage up to 1000V as standard, system-integrated DC main distribution with up to 9 inputs, motor-driven DC switch-disconnector, AC contactor and AC circuit breaker, overvoltage protection on the DC side, comprehensive power distribution grid management functions (incl. LVRT). Connection for external electricity supply. Intended for connection to an external transformer.
<i>specific price 1)</i>																							
<b>Max. DC-Voltage:</b>	0																						1000 V
<b>DC connection:</b>	0	1	2	4	5																		0 Fuses on all poles 1 Fuses in plus, isolating blades in minus 2 Fuses in minus, isolating blades in plus 4 Bus bar 5 For Optiprotect
<b>DC fuses:</b>	0	1	2	3	4	5	6																0 Without 1 200 A (9 per pole) 2 250 A (9 per pole) 3 315 A (7 per pole) 4 400 A (6 per pole) 5 125 A (9 pcs. per pole) 6 160 A (9 pcs. per pole)
<b>Grounding:</b>			0	1	2	3	4	5	6	7	8												0 Without 1 GFDI minus grounding 2 Remote GFDI minus grounding 3 GFDI plus grounding 4 Remote GFDI plus grounding 5 Soft grounding plus 6 Soft grounding minus 7 Remote soft grounding plus 8 Remote soft grounding minus
<b>Insulation monitoring:</b>				0	1	2																	0 none 1 Yes 2 Yes, with grounding
<b>Communication interface</b>							2	3															2 SC-COM + LWL 3 SC-COM
<b>Language:/Country of destination:</b>									DE	DE													DE DE German/Germany EN EN English/England ES ES Spanish/Spain KR KR Korean/Korea IT IT Italian/Italy FR FR French/France CN CN Chinese/China CZ CZ Czech/Czech Republic GR GR Greek/Greece PT PT Portuguese/Portugal NL NL Dutch/Netherlands RO RO Romanian/Romania JP JP Japanese/Japan - US USA 5H Standard 50 Hz 6H Standard 60 Hz
<b>AC switch:</b>										2	3												2 Circuit breaker 3 Without
<b>String current monitoring:</b>										0	1	2	3	4	5	6							0 none 1 yes, 2 hubs 2 yes, 3 hubs 3 Optiprotect 32/16 4 Optiprotect 16/16 5 Optiprotect 24/12 6 Optiprotect 12/12
<b>AC voltage:</b>												5											5 315 V
<b>Cabinet layout:</b>												0	2										0 Standard 2 For station installation
<b>Additional functions:</b>														0	1	2							0 none 1 PID 2 IEEE 1547

**Comments**

1) Can differ depending on options.



**Sunny Central 500CP XT (SC-500CP-10)**

Valid from: as provided in contract

<b>SC-500CP-10</b> <b>(price before options):</b>	x	x	x	x	x	0	x	xx	xx	x	x	x	x	x	x	Self-commutated 500 kVA converter suitable for outdoor use with IP54-protected enclosure, connection area IP 43, innovative cooling concept OptiCool, DC input voltage up to 1000V as standard, system-integrated DC main distribution with up to 9 inputs, motor-driven DC switch-disconnector, AC contactor and AC circuit breaker, overvoltage protection on the DC side, comprehensive power distribution grid management functions (incl. LVRT). Connection for external electricity supply. Intended for connection to an external transformer.
<b>specific price 1)</b>																
<b>Max. DC-Voltage:</b>	0															1000 V
<b>DC connection:</b>	0															Fuses on all poles
	1															Fuses in plus, isolating blades in minus
	2															Fuses in minus, isolating blades in plus
	4															Bus bar
	5															For Optiprotect
<b>DC fuses:</b>	0															Without
	1															200 A (9 per pole)
	2															250 A (9 per pole)
	3															315 A (7 per pole)
	4															400 A (6 per pole)
	5															125 A (9 pcs. per pole)
6															160 A (9 pcs. per pole)	
<b>Grounding:</b>	0															Without
	1															GFDI minus grounding
	2															Remote GFDI minus grounding
	3															GFDI plus grounding
	4															Remote GFDI plus grounding
	5															Soft grounding plus
	6															Soft grounding minus
	7															Remote soft grounding plus
8															Remote soft grounding minus	
<b>Insulation monitoring:</b>	0															none
	1															Yes
	2															Yes, with grounding
<b>Communication interface</b>	2															SC-COM + LWL
	3															SC-COM
<b>Language:/Country of destination:</b>							DE	DE								German/Germany
							EN	EN								English/England
							ES	ES								Spanish/Spain
							KR	KR								Korean/Korea
							IT	IT								Italian/Italy
							FR	FR								French/France
							CN	CN								Chinese/China
							CZ	CZ								Czech/Czech Republic
							GR	GR								Greek/Greece
							PT	PT								Portuguese/Portugal
							NL	NL								Dutch/Netherlands
							RO	RO								Romanian/Romania
							JP	JP								Japanese/Japan
							-	US								USA
							5H									Standard 50 Hz
						6H									Standard 60 Hz	
<b>AC switch:</b>	2															Circuit breaker
	3															Without
<b>String current monitoring:</b>	0															none
	1															yes, 2 hubs
	2															yes, 3 hubs
	3															Optiprotect 32/16
	4															Optiprotect 16/16
	5															Optiprotect 24/12
6															Optiprotect 12/12	
<b>AC voltage:</b>												6				270 V
<b>Cabinet layout:</b>	0															Standard
	2															For station installation
<b>Additional functions:</b>	0															none
	1															PID
	2															IEEE 1547

**Comments**

1) Can differ depending on options.





## Stations and Transformers



**Transformer Compact Station for SC-CP-Inverter (TCS 1800SC-DE)**

Valid from: as provided in contract

<b>TCS 1800SC-DE (price before options):</b>	6	DE	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>				0											Concrete compact station Steel compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0									Without With
<b>Internal power supply:</b>							0								Without With
<b>Communit:</b>								0							Without With
<b>Medium voltage switchgear:</b>									0						Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0					Standard Protection against chemically active substances
<b>Language:</b>															DE German EN English ES Spanish IT Italian CZ Czech FR French BG Bulgarian GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1600SC-DE)**

Valid from: as provided in contract

<b>TCS 1600SC-DE (price before options):</b>	5	DE	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>				0											Concrete compact station Steel compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>						0									Without With
<b>Internal power supply:</b>							0								Without With
<b>Communit:</b>								0							Without With
<b>Medium voltage switchgear:</b>									0						Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0					Standard Protection against chemically active substances
<b>Language:</b>															DE German EN English ES Spanish IT Italian CZ Czech FR French BG Bulgarian GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customers-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1250SC-DE)**

Valid from: as provided in contract

<b>TCS 1250SC-DE</b> (price before options):	4	DE	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>														Concrete compact station Steel compact station
<b>Voltage level:</b>														20 kV
<b>Medium voltage transformer:</b>														Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>														Without With
<b>Internal power supply:</b>														Without With
<b>Communit:</b>														Without With
<b>Medium voltage switchgear:</b>														Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>														Standard Protection against chemically active substances
<b>Language:</b>														DE German EN English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1000SC-DE)**

Valid from: as provided in contract

<b>TCS 1000SC-DE (price before options):</b>	3	DE	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>														Concrete compact station Steel compact station
<b>Voltage level:</b>														20 kV
<b>Medium voltage transformer:</b>														Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>														Without With
<b>Internal power supply:</b>														Without With
<b>Communit:</b>														Without With
<b>Medium voltage switchgear:</b>														Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>														Standard Protection against chemically active substances
<b>Language:</b>														DE German EN English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 900SC-DE)**

Valid from: as provided in contract

<b>TCS 900SC-DE (price before options):</b>	7	DE	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>				0											Concrete compact station Steel compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0									Without With
<b>Internal power supply:</b>							0								Without With
<b>Communit:</b>								0							Without With
<b>Medium voltage switchgear:</b>									0						Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0					Standard Protection against chemically active substances
<b>Language:</b>															DE German EN English ES Spanish IT Italian CZ Czech FR French BG Bulgarian GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 800SC-DE)**

Valid from: as provided in contract

<b>TCS 800SC-DE (price before options):</b>	2	DE	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>				0											Concrete compact station Steel compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>						0									Without With
<b>Internal power supply:</b>							0								Without With
<b>Communit:</b>								0							Without With
<b>Medium voltage switchgear:</b>									0						Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0					Standard Protection against chemically active substances
<b>Language:</b>															DE German EN English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 630SC-DE)**

Valid from: as provided in contract

<b>TCS 630SC-DE (price before options):</b>	1	DE	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>														Concrete compact station Steel compact station
<b>Voltage level:</b>														20 kV
<b>Medium voltage transformer:</b>														Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>														Without With
<b>Internal power supply:</b>														Without With
<b>Communit:</b>														Without With
<b>Medium voltage switchgear:</b>														Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>														Standard Protection against chemically active substances
<b>Language:</b>														DE German EN English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany

The transport costs for release orders and/or orders of individual components will be charged separately.





**Transformer Compact Station for SC-CP-Inverter (TCS 500SC-DE)**

Valid from: as provided in contract

<b>TCS 500SC-DE (price before options):</b>	0	DE	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0											Concrete compact station Steel compact station
<b>Voltage level:</b>			0											20 kV
<b>Medium voltage transformer:</b>				1										Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>					0									Without With
<b>Internal power supply:</b>						0								Without With
<b>Communit:</b>							0							Without With
<b>Medium voltage switchgear:</b>								0						Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>									0					Standard Protection against chemically active substances
<b>Language:</b>														DE German EN English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1800SC-IT)**

Valid from: as provided in contract

<b>TCS 1800SC-IT (price before options):</b>	6	IT	x	x	x	x	x	x	x	x	x	x	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>			0												20 kV
	<b>Medium voltage transformer:</b>				1											Transformer with iron core
	<b>LV power switch:</b>					0	1									Without With
	<b>Internal power supply:</b>						0	1								Without With
	<b>Communit:</b>							0	1							Without With
	<b>Medium voltage switchgear:</b>								0	1	2					Without String connection (2-field) Ring connection (3-field)
	<b>Surrounding area:</b>									0	1					Standard Protection against chemically active substances
	<b>Additional equipment:</b>										0	1				Without Counter for low voltage side
	<b>Additional power:</b>											0	1			Without Transport & SC CP connection
	<b>Language:</b>														EN IT	English Italian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Italy (mainland, Sardinia and Sicily).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

IT) Italian version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.

\*The Sunny Centrals will be transported directly to the construction site and unloaded there. In addition, the electrical connection between Sunny Central CP and TCS will be executed (preparation and cabling to be provided on-site)



**Transformer Compact Station for SC-CP-Inverter (TCS 1600SC-IT)**

Valid from: as provided in contract

<b>TCS 1600SC-IT (price before options):</b>	5	IT	x	x	x	x	x	x	x	x	x	x	x	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>			0	3											20 kV 15kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>					0	1									Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>							0	1							Without With
<b>Medium voltage switchgear:</b>								0	1	2					Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>									0	1					Standard Protection against chemically active substances
<b>Additional equipment:</b>										0	1				Without Counter for low voltage side
<b>Additional power:</b>											0	1			Without Transport & SC CP connection
<b>Language:</b>													EN	IT	English Italian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Italy (mainland, Sardinia and Sicily).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

IT) Italian version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.

\*The Sunny Centrals will be transported directly to the construction site and unloaded there. In addition, the electrical connection between Sunny Central CP and TCS will be executed (preparation and cabling to be provided on-site)



**Transformer Compact Station for SC-CP-Inverter (TCS 1250SC-IT)**

Valid from: as provided in contract

<b>TCS 1250SC-IT (price before options):</b>	4	IT	x	x	x	x	x	x	x	x	x	x	x	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>			0	3											20 kV 15kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>					0	1									Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>							0	1							Without With
<b>Medium voltage switchgear:</b>								0	1	2					Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>									0	1					Standard Protection against chemically active substances
<b>Additional equipment:</b>										0	1				Without Counter for low voltage side
<b>Additional power:</b>											0	1			Without Transport & SC CP connection
<b>Language:</b>													EN	IT	English Italian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Italy (mainland, Sardinia and Sicily).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

IT) Italian version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.

\*The Sunny Centrals will be transported directly to the construction site and unloaded there. In addition, the electrical connection between Sunny Central CP and TCS will be executed (preparation and cabling to be provided on-site)



**Transformer Compact Station for SC-CP-Inverter (TCS 1000SC-IT)**

Valid from: as provided in contract

<b>TCS 1000SC-IT (price before options):</b>	3	IT	x	x	x	x	x	x	x	x	x	x	x	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>			0	3											20 kV 15kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>					0	1									Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>							0	1							Without With
<b>Medium voltage switchgear:</b>								0	1	2					Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>									0	1					Standard Protection against chemically active substances
<b>Additional equipment:</b>										0	1				Without Counter for low voltage side
<b>Additional power:</b>											0	1			Without Transport & SC CP connection
<b>Language:</b>													EN	IT	English Italian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Italy (mainland, Sardinia and Sicily).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

IT) Italian version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.

\*The Sunny Centrals will be transported directly to the construction site and unloaded there. In addition, the electrical connection between Sunny Central CP and TCS will be executed (preparation and cabling to be provided on-site)



**Transformer Compact Station for SC-CP-Inverter (TCS 900SC-IT)**

Valid from: as provided in contract

<b>TCS 900SC-IT (price before options):</b>	7	IT	x	x	x	x	x	x	x	x	x	x	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
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<b>Cabinet:</b>			0											Concrete compact station
<b>Voltage level:</b>			0											20 kV
<b>Medium voltage transformer:</b>				1										Transformer with iron core
<b>LV power switch:</b>					0	1								Without With
<b>Internal power supply:</b>						0	1							Without With
<b>Communit:</b>							0	1						Without With
<b>Medium voltage switchgear:</b>								0	1	2				Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>									0	1				Standard Protection against chemically active substances
<b>Additional equipment:</b>										0	1			Without Counter for low voltage side
<b>Additional power:</b>											0	1		Without Transport & SC CP connection
<b>Language:</b>													EN IT	English Italian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Italy (mainland, Sardinia and Sicily).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

IT) Italian version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.

\*The Sunny Centrals will be transported directly to the construction site and unloaded there. In addition, the electrical connection between Sunny Central CP and TCS will be executed (preparation and cabling to be provided on-site)



**Transformer Compact Station for SC-CP-Inverter (TCS 800SC-IT)**

Valid from: as provided in contract

<b>TCS 800SC-IT (price before options):</b>	2	IT	x	x	x	x	x	x	x	x	x	x	x	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>			0	3											20 kV 15kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>					0	1									Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>							0	1							Without With
<b>Medium voltage switchgear:</b>								0	1	2					Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>									0	1					Standard Protection against chemically active substances
<b>Additional equipment:</b>										0	1				Without Counter for low voltage side
<b>Additional power:</b>											0	1			Without Transport & SC CP connection
<b>Language:</b>													EN	IT	English Italian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Italy (mainland, Sardinia and Sicily).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

IT) Italian version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.

\*The Sunny Centrals will be transported directly to the construction site and unloaded there. In addition, the electrical connection between Sunny Central CP and TCS will be executed (preparation and cabling to be provided on-site)



**Transformer Compact Station for SC-CP-Inverter (TCS 630SC-IT)**

Valid from: as provided in contract

<b>TCS 630SC-IT (price before options):</b>	1	IT	x	x	x	x	x	x	x	x	x	x	x	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>			0	3											20 kV 15kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>					0	1									Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>							0	1							Without With
<b>Medium voltage switchgear:</b>								0	1	2					Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>									0	1					Standard Protection against chemically active substances
<b>Additional equipment:</b>										0	1				Without Counter for low voltage side
<b>Additional power:</b>											0	1			Without Transport & SC CP connection
<b>Language:</b>													EN	IT	English Italian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Italy (mainland, Sardinia and Sicily).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

IT) Italian version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.

\*The Sunny Centrals will be transported directly to the construction site and unloaded there. In addition, the electrical connection between Sunny Central CP and TCS will be executed (preparation and cabling to be provided on-site)





**Transformer Compact Station for SC-CP-Inverter (TCS 500SC-IT)**

Valid from: as provided in contract

<b>TCS 500SC-IT (price before options):</b>	0	IT	x	x	x	x	x	x	x	x	x	x	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>		0													Concrete compact station
	<b>Voltage level:</b>			0	3											20 kV 15kV
	<b>Medium voltage transformer:</b>				1											Transformer with iron core
	<b>LV power switch:</b>					0	1									Without With
	<b>Internal power supply:</b>						0	1								Without With
	<b>Communit:</b>							0	1							Without With
	<b>Medium voltage switchgear:</b>								0	1	2					Without String connection (2-field) Ring connection (3-field)
	<b>Surrounding area:</b>									0	1					Standard Protection against chemically active substances
	<b>Additional equipment:</b>										0	1				Without Counter for low voltage side
	<b>Additional power:</b>											0	1			Without Transport & SC CP connection
	<b>Language:</b>														EN IT	English Italian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Italy (mainland, Sardinia and Sicily).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

IT) Italian version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.

\*The Sunny Centrals will be transported directly to the construction site and unloaded there. In addition, the electrical connection between Sunny Central CP and TCS will be executed (preparation and cabling to be provided on-site)



**Transformer Compact Station for SC-CP-Inverter (TCS 1600SC-FR)**

Valid from: as provided in contract

<b>TCS 1600SC-FR (price before options):</b>	5	FR	x	x	x	x	x	x	x	x	x	x	x	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0													Concrete compact station
<b>Voltage level:</b>				0												20 kV
<b>Medium voltage transformer:</b>					1											Transformer with iron core
<b>LV power switch:</b>						1										With
<b>Internal power supply:</b>							0									Without
							1									With
<b>Communit:</b>								0								Without
<b>Medium voltage switchgear:</b>									0							Without
									1							String connection (2-field)
									2							Ring connection (3-field)
<b>Surrounding area:</b>										0						Standard
										1						Protection against chemically active substances
<b>Additional equipment:</b>											0					Without
											2					Staggered switch
											3					Hierarchical key
											4					Staggered switch and hierarchical key
<b>Language:</b>																EN English
																FR French

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within France (not including islands, not including overseas).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

FR) France version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1250SC-FR)**

Valid from: as provided in contract

<b>TCS 1250SC-FR (price before options):</b>	4	FR	x	x	x	x	x	x	x	x	x	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.			
	<b>Cabinet:</b>		0												Concrete compact station		
	<b>Voltage level:</b>			0											20 kV		
	<b>Medium voltage transformer:</b>				1										Transformer with iron core		
	<b>LV power switch:</b>					1									With		
	<b>Internal power supply:</b>						0	1							Without With		
	<b>Communit:</b>							0							Without		
	<b>Medium voltage switchgear:</b>								0	1	2				Without String connection (2-field) Ring connection (3-field)		
	<b>Surrounding area:</b>									0	1				Standard Protection against chemically active substances		
	<b>Additional equipment:</b>											0	2		3	4	Without Staggered switch Hierarchical key Staggered switch and hierarchical key
	<b>Language:</b>															EN English FR French	

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within France (not including islands, not including overseas).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

FR) France version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1000SC-FR)**

Valid from: as provided in contract

<b>TCS 1000SC-FR (price before options):</b>	3	FR	x	x	x	x	x	x	x	x	x	x	x	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.	
<b>Cabinet:</b>			0													Concrete compact station	
<b>Voltage level:</b>				0												20 kV	
<b>Medium voltage transformer:</b>					1											Transformer with iron core	
<b>LV power switch:</b>						1										With	
<b>Internal power supply:</b>							0	1								Without With	
<b>Communit:</b>									0							Without	
<b>Medium voltage switchgear:</b>										0	1	2				Without String connection (2-field) Ring connection (3-field)	
<b>Surrounding area:</b>											0	1				Standard Protection against chemically active substances	
<b>Additional equipment:</b>													0	2	3	4	Without Staggered switch Hierarchical key Staggered switch and hierarchical key
<b>Language:</b>																EN English FR French	

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within France (not including islands, not including overseas).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

FR) France version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 800SC-FR)**

Valid from: as provided in contract

<b>TCS 800SC-FR (price before options):</b>	2	FR	x	x	x	x	x	x	x	x	x	x	x	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.	
<b>Cabinet:</b>			0													Concrete compact station	
<b>Voltage level:</b>				0												20 kV	
<b>Medium voltage transformer:</b>					1											Transformer with iron core	
<b>LV power switch:</b>						1										With	
<b>Internal power supply:</b>							0	1								Without With	
<b>Communit:</b>									0							Without	
<b>Medium voltage switchgear:</b>										0	1	2				Without String connection (2-field) Ring connection (3-field)	
<b>Surrounding area:</b>											0	1				Standard Protection against chemically active substances	
<b>Additional equipment:</b>													0	2	3	4	Without Staggered switch Hierarchical key Staggered switch and hierarchical key
<b>Language:</b>																EN English FR French	

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within France (not including islands, not including overseas).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

FR) France version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 630SC-FR)**

Valid from: as provided in contract

<b>TCS 630SC-FR (price before options):</b>	1	FR	x	x	x	x	x	x	x	x	x	x	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
<b>Cabinet:</b>			0												Concrete compact station		
<b>Voltage level:</b>				0											20 kV		
<b>Medium voltage transformer:</b>					1										Transformer with iron core		
<b>LV power switch:</b>						1									With		
<b>Internal power supply:</b>							0	1							Without With		
<b>Communit:</b>									0						Without		
<b>Medium voltage switchgear:</b>										0	1	2			Without String connection (2-field) Ring connection (3-field)		
<b>Surrounding area:</b>											0	1			Standard Protection against chemically active substances		
<b>Additional equipment:</b>													0	2	3	4	Without Staggered switch Hierarchical key Staggered switch and hierarchical key
<b>Language:</b>															EN English FR French		

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within France (not including islands, not including overseas).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

FR) France version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 500SC-FR)**

Valid from: as provided in contract

<b>TCS 500SC-FR (price before options):</b>	0	FR	x	x	x	x	x	x	x	x	x	x	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.	
<b>Cabinet:</b>			0												Concrete compact station	
<b>Voltage level:</b>				0											20 kV	
<b>Medium voltage transformer:</b>					1										Transformer with iron core	
<b>LV power switch:</b>						1									With	
<b>Internal power supply:</b>							0	1							Without With	
<b>Communit:</b>								0							Without	
<b>Medium voltage switchgear:</b>									0	1	2				Without String connection (2-field) Ring connection (3-field)	
<b>Surrounding area:</b>										0	1				Standard Protection against chemically active substances	
<b>Additional equipment:</b>												0	2	3	4	Without Staggered switch Hierarchical key Staggered switch and hierarchical key
<b>Language:</b>															EN English FR French	

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within France (not including islands, not including overseas).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

FR) France version: Temperatur class T10 for Concrete station (inclusive), Interlocking-System upper voltage side integrated in Concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1600SC-ES)**

Valid from: as provided in contract

<b>TCS 1600SC-ES (price before options):</b>	5	ES	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
--	---	----	---	---	---	---	---	---	---	---	---	---	---	----	--

<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0	1								Without With
<b>Internal power supply:</b>							0	1							Without With
<b>Communit:</b>								0	1						Without With
<b>Medium voltage switchgear:</b>									0	1	2				Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0	1				Standard Protection against chemically active substances
<b>Language:</b>														EN ES	English Spanish

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Spain (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

ES) Spanish version: Temperature class T10 for concrete station (inclusive), Interlocking system high-voltage side integrated in concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.





**Transformer Compact Station for SC-CP-Inverter (TCS 1250SC-ES)**

Valid from: as provided in contract

<b>TCS 1250SC-ES (price before options):</b>	4	ES	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0	1								Without With
<b>Internal power supply:</b>							0	1							Without With
<b>Communit:</b>								0	1						Without With
<b>Medium voltage switchgear:</b>									0	1	2				Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0	1				Standard Protection against chemically active substances
<b>Language:</b>														EN ES	English Spanish

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Spain (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

ES) Spanish version: Temperature class T10 for concrete station (inclusive), Interlocking system high-voltage side integrated in concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1000SC-ES)**

Valid from: as provided in contract

TCS 1000SC-ES (price before options):	3	ES	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>				0											20 kV
	<b>Medium voltage transformer:</b>					1										Transformer with iron core
	<b>LV power switch:</b>						0	1								Without With
	<b>Internal power supply:</b>							0	1							Without With
	<b>Communit:</b>								0	1						Without With
	<b>Medium voltage switchgear:</b>									0	1	2				Without String connection (2-field) Ring connection (3-field)
	<b>Surrounding area:</b>										0	1				Standard Protection against chemically active substances
	<b>Language:</b>														EN ES	English Spanish

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Spain (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

ES) Spanish version: Temperature class T10 for concrete station (inclusive), Interlocking system high-voltage side integrated in concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 800SC-ES)**

Valid from: as provided in contract

<b>TCS 800SC-ES (price before options):</b>	2	ES	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
---	---	----	---	---	---	---	---	---	---	---	---	---	---	----	--

<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>			0												20 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>					0	1									Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>							0	1							Without With
<b>Medium voltage switchgear:</b>								0	1	2					Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>									0	1					Standard Protection against chemically active substances
<b>Language:</b>														EN ES	English Spanish

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Spain (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

ES) Spanish version: Temperature class T10 for concrete station (inclusive), Interlocking system high-voltage side integrated in concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 630SC-ES)**

Valid from: as provided in contract

TCS 630SC-ES (price before options):	1	ES	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0											Concrete compact station
<b>Voltage level:</b>				0										20 kV
<b>Medium voltage transformer:</b>					1									Transformer with iron core
<b>LV power switch:</b>						0	1							Without With
<b>Internal power supply:</b>							0	1						Without With
<b>Communit:</b>								0	1					Without With
<b>Medium voltage switchgear:</b>									0	1	2			Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0	1			Standard Protection against chemically active substances
<b>Language:</b>													EN ES	English Spanish

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Spain (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

ES) Spanish version: Temperature class T10 for concrete station (inclusive), Interlocking system high-voltage side integrated in concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 500SC-ES)**

Valid from: as provided in contract

<b>TCS 500SC-ES (price before options):</b>	0	ES	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0											Concrete compact station
<b>Voltage level:</b>				0										20 kV
<b>Medium voltage transformer:</b>					1									Transformer with iron core
<b>LV power switch:</b>						0	1							Without With
<b>Internal power supply:</b>							0	1						Without With
<b>Communit:</b>								0	1					Without With
<b>Medium voltage switchgear:</b>									0	1	2			Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0	1			Standard Protection against chemically active substances
<b>Language:</b>													EN ES	English Spanish

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Spain (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

ES) Spanish version: Temperature class T10 for concrete station (inclusive), Interlocking system high-voltage side integrated in concrete station (inclusive).

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1600SC-CZ)**

Valid from: as provided in contract

TCS 1600SC-CZ (price before options):	5	CZ	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.

<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>				4											22 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0	1								Without With
<b>Internal power supply:</b>							0	1							Without With
<b>Communit:</b>								0	1						Without With
<b>Medium voltage switchgear:</b>									0	1	2				Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0	1				Standard Protection against chemically active substances
<b>Language:</b>														EN CZ	English Czech

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within the Czech Republic and Slovakia

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

CZ) Version for the Czech Republic and Slovakia

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1250SC-CZ)**

Valid from: as provided in contract

<b>TCS 1250SC-CZ (price before options):</b>	4	CZ	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0											Concrete compact station
<b>Voltage level:</b>				4										22 kV
<b>Medium voltage transformer:</b>					1									Transformer with iron core
<b>LV power switch:</b>						0	1							Without With
<b>Internal power supply:</b>							0	1						Without With
<b>Communit:</b>								0	1					Without With
<b>Medium voltage switchgear:</b>									0	1	2			Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0	1			Standard Protection against chemically active substances
<b>Language:</b>													EN CZ	English Czech

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within the Czech Republic and Slovakia

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

CZ) Version for the Czech Republic and Slovakia

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1000SC-CZ)**

Valid from: as provided in contract

TCS 1000SC-CZ (price before options):	3	CZ	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>				4											22 kV
	<b>Medium voltage transformer:</b>					1										Transformer with iron core
	<b>LV power switch:</b>						0	1								Without With
	<b>Internal power supply:</b>							0	1							Without With
	<b>Communit:</b>								0	1						Without With
	<b>Medium voltage switchgear:</b>									0	1	2				Without String connection (2-field) Ring connection (3-field)
	<b>Surrounding area:</b>										0	1				Standard Protection against chemically active substances
	<b>Language:</b>														EN CZ	English Czech

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within the Czech Republic and Slovakia

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

CZ) Version for the Czech Republic and Slovakia

The transport costs for release orders and/or orders of individual components will be charged separately.





**Transformer Compact Station for SC-CP-Inverter (TCS 800SC-CZ)**

Valid from: as provided in contract

TCS 800SC-CZ (price before options):	2	CZ	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>				4											22 kV
	<b>Medium voltage transformer:</b>					1										Transformer with iron core
	<b>LV power switch:</b>						0	1								Without With
	<b>Internal power supply:</b>							0	1							Without With
	<b>Communit:</b>								0	1						Without With
	<b>Medium voltage switchgear:</b>									0	1	2				Without String connection (2-field) Ring connection (3-field)
	<b>Surrounding area:</b>										0	1				Standard Protection against chemically active substances
	<b>Language:</b>														EN CZ	English Czech

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within the Czech Republic and Slovakia

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

CZ) Version for the Czech Republic and Slovakia

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 630SC-CZ)**

Valid from: as provided in contract

<b>TCS 630SC-CZ</b> (price before options):	1	CZ	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>				4											22 kV
	<b>Medium voltage transformer:</b>					1										Transformer with iron core
	<b>LV power switch:</b>						0	1								Without With
	<b>Internal power supply:</b>							0	1							Without With
	<b>Communit:</b>								0	1						Without With
	<b>Medium voltage switchgear:</b>									0	1	2				Without String connection (2-field) Ring connection (3-field)
	<b>Surrounding area:</b>										0	1				Standard Protection against chemically active substances
	<b>Language:</b>														EN CZ	English Czech

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within the Czech Republic and Slovakia

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

CZ) Version for the Czech Republic and Slovakia

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 500SC-CZ)**

Valid from: as provided in contract

<b>TCS 500SC-CZ (price before options):</b>	0	CZ	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0											Concrete compact station
<b>Voltage level:</b>				4										22 kV
<b>Medium voltage transformer:</b>					1									Transformer with iron core
<b>LV power switch:</b>						0	1							Without With
<b>Internal power supply:</b>							0	1						Without With
<b>Communit:</b>								0	1					Without With
<b>Medium voltage switchgear:</b>									0	1	2			Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0	1			Standard Protection against chemically active substances
<b>Language:</b>													EN CZ	English Czech

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within the Czech Republic and Slovakia

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

CZ) Version for the Czech Republic and Slovakia

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1600SC-BG)**

Valid from: as provided in contract

<b>TCS 1600SC-BG</b> (price before options):	5	BG	x	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0													Concrete compact station
<b>Voltage level:</b>				0												20 kV
<b>Medium voltage transformer:</b>					1											Transformer with iron core
					2											Transformer with amorphous core
<b>LV power switch:</b>						0										Without
						1										With
<b>Internal power supply:</b>							0									Without
							1									With
<b>Communit:</b>								0								Without
								1								With
<b>Medium voltage switchgear:</b>									0							Without
									1							String connection (2-field)
									2							Ring connection (3-field)
<b>Surrounding area:</b>										0						Standard
										1						Protection against chemically active substances
<b>Language:</b>														EN		English
														BG		Bulgarian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Bulgaria (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

BG) Version for Bulgaria

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1250SC-BG)**

Valid from: as provided in contract

<b>TCS 1250SC-BG (price before options):</b>	4	BG	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>																
	<b>Cabinet:</b>			0													Concrete compact station
	<b>Voltage level:</b>				0												20 kV
	<b>Medium voltage transformer:</b>					1											Transformer with iron core
						2											Transformer with amorphous core
	<b>LV power switch:</b>						0										Without
							1										With
	<b>Internal power supply:</b>							0									Without
								1									With
	<b>Communit:</b>								0								Without
									1								With
	<b>Medium voltage switchgear:</b>									0							Without
									1						String connection (2-field)		
									2						Ring connection (3-field)		
<b>Surrounding area:</b>										0					Standard		
										1					Protection against chemically active substances		
<b>Language:</b>														EN	English		
														BG	Bulgarian		

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Bulgaria (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

BG) Version for Bulgaria

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1000SC-BG)**

Valid from: as provided in contract

<b>TCS 1000SC-BG (price before options):</b>	3	BG	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>				0											20 kV
	<b>Medium voltage transformer:</b>					1										Transformer with iron core
						2										Transformer with amorphous core
	<b>LV power switch:</b>						0									Without
							1									With
	<b>Internal power supply:</b>							0								Without
								1								With
	<b>Communit:</b>								0							Without
									1							With
	<b>Medium voltage switchgear:</b>									0						Without
									1					String connection (2-field)		
									2					Ring connection (3-field)		
<b>Surrounding area:</b>										0				Standard		
										1				Protection against chemically active substances		
<b>Language:</b>													EN	English		
													BG	Bulgarian		

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Bulgaria (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

BG) Version for Bulgaria

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 800SC-BG)**

Valid from: as provided in contract

<b>TCS 800SC-BG (price before options):</b>	2	BG	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
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<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
					2										Transformer with amorphous core
<b>LV power switch:</b>						0									Without
						1									With
<b>Internal power supply:</b>							0								Without
							1								With
<b>Communit:</b>								0							Without
								1							With
<b>Medium voltage switchgear:</b>									0						Without
									1						String connection (2-field)
									2						Ring connection (3-field)
<b>Surrounding area:</b>										0					Standard
										1					Protection against chemically active substances
<b>Language:</b>													EN		English
													BG		Bulgarian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Bulgaria (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

BG) Version for Bulgaria

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 630SC-BG)**

Valid from: as provided in contract

<b>TCS 630SC-BG (price before options):</b>	1	BG	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
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<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
					2										Transformer with amorphous core
<b>LV power switch:</b>						0									Without
						1									With
<b>Internal power supply:</b>							0								Without
							1								With
<b>Communit:</b>								0							Without
								1							With
<b>Medium voltage switchgear:</b>									0						Without
									1						String connection (2-field)
									2						Ring connection (3-field)
<b>Surrounding area:</b>										0					Standard
										1					Protection against chemically active substances
<b>Language:</b>														EN	English
														BG	Bulgarian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Bulgaria (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

BG) Version for Bulgaria

The transport costs for release orders and/or orders of individual components will be charged separately.





**Transformer Compact Station for SC-CP-Inverter (TCS 500SC-BG)**

Valid from: as provided in contract

<b>TCS 500SC-BG (price before options):</b>	0	BG	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>				0											20 kV
	<b>Medium voltage transformer:</b>					1										Transformer with iron core
						2										Transformer with amorphous core
	<b>LV power switch:</b>						0									Without
							1									With
	<b>Internal power supply:</b>							0								Without
								1								With
	<b>Communit:</b>								0							Without
									1							With
	<b>Medium voltage switchgear:</b>									0						Without
									1					String connection (2-field)		
									2					Ring connection (3-field)		
<b>Surrounding area:</b>										0				Standard		
										1				Protection against chemically active substances		
<b>Language:</b>													EN	English		
													BG	Bulgarian		

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Bulgaria (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

BG) Version for Bulgaria

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1800SC-GR)**

Valid from: as provided in contract

<b>TCS 1800SC-GR (price before options):</b>	6	GR	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0	1								Without With
<b>Internal power supply:</b>							0	1							Without With
<b>Communit:</b>								0	1						Without With
<b>Medium voltage switchgear:</b>									0	1	2				Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0	1				Standard Protection against chemically active substances
<b>Language:</b>															EN English GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Greece (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

GR) Version for Greece

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1600SC-GR)**

Valid from: as provided in contract

<b>TCS 1600SC-GR</b> (price before options):	5	GR	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>														Concrete compact station Steel compact station
<b>Voltage level:</b>														20 kV
<b>Medium voltage transformer:</b>														Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>														Without With
<b>Internal power supply:</b>														Without With
<b>Communit:</b>														Without With
<b>Medium voltage switchgear:</b>														Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>														Standard Protection against chemically active substances
<b>Language:</b>														EN English GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Greece (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

GR) Version for Greece

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1250SC-GR)**

Valid from: as provided in contract

<b>TCS 1250SC-GR (price before options):</b>	4	GR	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>															Concrete compact station Steel compact station
<b>Voltage level:</b>															20 kV
<b>Medium voltage transformer:</b>															Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>															Without With
<b>Internal power supply:</b>															Without With
<b>Communit:</b>															Without With
<b>Medium voltage switchgear:</b>															Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>															Standard Protection against chemically active substances
<b>Language:</b>															EN English GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Greece (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

GR) Version for Greece

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1000SC-GR)**

Valid from: as provided in contract

<b>TCS 1000SC-GR</b> (price before options):	3	GR	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>				0										Concrete compact station Steel compact station
<b>Voltage level:</b>				0										20 kV
<b>Medium voltage transformer:</b>					1									Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>						0								Without With
<b>Internal power supply:</b>							0							Without With
<b>Communit:</b>								0						Without With
<b>Medium voltage switchgear:</b>									0					Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0				Standard Protection against chemically active substances
<b>Language:</b>														EN English GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Greece (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

GR) Version for Greece

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 900SC-GR)**

Valid from: as provided in contract

<b>TCS 900SC-GR (price before options):</b>	7	GR	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0	1								Without With
<b>Internal power supply:</b>								0	1						Without With
<b>Communit:</b>										0	1				Without With
<b>Medium voltage switchgear:</b>											0	1	2		Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>												0	1		Standard Protection against chemically active substances
<b>Language:</b>															EN English GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Greece (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

GR) Version for Greece

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 800SC-GR)**

Valid from: as provided in contract

<b>TCS 800SC-GR (price before options):</b>	2	GR	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>				0											Concrete compact station Steel compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>						0									Without With
<b>Internal power supply:</b>							0								Without With
<b>Communit:</b>								0							Without With
<b>Medium voltage switchgear:</b>									0						Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>										0					Standard Protection against chemically active substances
<b>Language:</b>															EN English GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Greece (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

GR) Version for Greece

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 630SC-GR)**

Valid from: as provided in contract

<b>TCS 630SC-GR</b> (price before options):	1	GR	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>														Concrete compact station Steel compact station
<b>Voltage level:</b>														20 kV
<b>Medium voltage transformer:</b>														Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>														Without With
<b>Internal power supply:</b>														Without With
<b>Communit:</b>														Without With
<b>Medium voltage switchgear:</b>														Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>														Standard Protection against chemically active substances
<b>Language:</b>														EN English GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Greece (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

GR) Version for Greece

The transport costs for release orders and/or orders of individual components will be charged separately.





**Transformer Compact Station for SC-CP-Inverter (TCS 500SC-GR)**

Valid from: as provided in contract

<b>TCS 500SC-GR</b> (price before options):	0	GR	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0											Concrete compact station Steel compact station
<b>Voltage level:</b>			0											20 kV
<b>Medium voltage transformer:</b>				1										Transformer with iron core Transformer with amorphous core
<b>LV power switch:</b>					0									Without With
<b>Internal power supply:</b>						0								Without With
<b>Communit:</b>							0							Without With
<b>Medium voltage switchgear:</b>								0						Without String connection (2-field) Ring connection (3-field)
<b>Surrounding area:</b>									0					Standard Protection against chemically active substances
<b>Language:</b>														EN English GR Greek

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Greece (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

GR) Version for Greece

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1600SC-IN)**

Valid from: as provided in contract

<b>TCS 1600SC-IN</b> (price before options):	5	IN	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				2	6										11 kV 33 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>					0	1									Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>							0	1							Without With
<b>Medium voltage switchgear:</b>								0	1						Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV
<b>Surrounding area:</b>										0					Standard
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Naini, Uttar Pradesh, India.

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1250SC-IN)**

Valid from: as provided in contract

<b>TCS 1250SC-IN (price before options):</b>	4	IN	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				2	6										11 kV 33 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>					0	1									Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>							0	1							Without With
<b>Medium voltage switchgear:</b>								0	1						Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV
<b>Surrounding area:</b>										0					Standard
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Naini, Uttar Pradesh, India.

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1000SC-IN)**

Valid from: as provided in contract

<b>TCS 1000SC-IN (price before options):</b>	3	IN	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				2	6										11 kV 33 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>					0	1									Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>							0	1							Without With
<b>Medium voltage switchgear:</b>								0	1						Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV
<b>Surrounding area:</b>										0					Standard
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Naini, Uttar Pradesh, India.

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 800SC-IN)**

Valid from: as provided in contract

<b>TCS 800SC-IN (price before options):</b>	2	IN	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				2	6										11 kV 33 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0	1								Without With
<b>Internal power supply:</b>							0	1							Without With
<b>Communit:</b>								0	1						Without With
<b>Medium voltage switchgear:</b>									0	1					Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV
<b>Surrounding area:</b>											0				Standard
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Naini, Uttar Pradesh, India.

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 630SC-IN)**

Valid from: as provided in contract

<b>TCS 630SC-IN (price before options):</b>	1	IN	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				0	6										11 kV 33 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>				0	1										Without With
<b>Internal power supply:</b>				0	1										Without With
<b>Communit:</b>				0	1										Without With
<b>Medium voltage switchgear:</b>								0	1						Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV
<b>Surrounding area:</b>										0					Standard
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Naini, Uttar Pradesh, India.

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 500SC-IN)**

Valid from: as provided in contract

<b>TCS 500SC-IN (price before options):</b>	0	IN	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				2	6										11 kV 33 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>					0	1									Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>							0	1							Without With
<b>Medium voltage switchgear:</b>								0	1						Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV
<b>Surrounding area:</b>										0					Standard
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Naini, Uttar Pradesh, India.

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1600SC-AU)**

Valid from: as provided in contract

<b>TCS 1600SC-AU (price before options):</b>	5	AU	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -5° C to +50° C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				2											11 kV
				4											22 kV
				6											33 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0									Without
						1									With
<b>Internal power supply:</b>							0								Without
							1								With
<b>Communit:</b>								0							Without
								1							With
<b>Medium voltage switchgear:</b>									0						Without
									1						String connection (2-field) 11 kV + 22 kV
										2					Ring connection (3-field) 11 kV + 22 kV
															Ring connection (3-field) 33 kV
<b>Surrounding area:</b>												1			Protection against chemically active substances
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Glen Waverley, Victoria, Australia

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.





**Transformer Compact Station for SC-CP-Inverter (TCS 1250SC-AU)**

Valid from: as provided in contract

<b>TCS 1250SC-AU (price before options):</b>	4	AU	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -5° C to +50° C.
<b>Cabinet:</b>				1											Steel compact station
<b>Voltage level:</b>				2	4	6									11 kV 22 kV 33 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0	1								Without With
<b>Internal power supply:</b>							0	1							Without With
<b>Communit:</b>								0	1						Without With
<b>Medium voltage switchgear:</b>									0	1					Without String connection (2-field) 11 kV + 22 kV Ring connection (3-field) 11 kV + 22 kV Ring connection (3-field) 33 kV
<b>Surrounding area:</b>												1			Protection against chemically active substances
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Glen Waverley, Victoria, Australia

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1000SC-AU)**

Valid from: as provided in contract

<b>TCS 1000SC-AU (price before options):</b>	3	AU	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -5° C to +50° C.
<b>Cabinet:</b>				1											Steel compact station
<b>Voltage level:</b>				2	4	6									11 kV 22 kV 33 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0	1								Without With
<b>Internal power supply:</b>							0	1							Without With
<b>Communit:</b>								0	1						Without With
<b>Medium voltage switchgear:</b>									0	1					Without String connection (2-field) 11 kV + 22 kV 2 Ring connection (3-field) 11 kV + 22 kV Ring connection (3-field) 33 kV
<b>Surrounding area:</b>												1			Protection against chemically active substances
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Glen Waverley, Victoria, Australia

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 800SC-AU)**

Valid from: as provided in contract

<b>TCS 800SC-AU (price before options):</b>	2	AU	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -5° C to +50° C.
<b>Cabinet:</b>				1											Steel compact station
<b>Voltage level:</b>				2	4	6									11 kV 22 kV 33 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0	1								Without With
<b>Internal power supply:</b>							0	1							Without With
<b>Communit:</b>								0	1						Without With
<b>Medium voltage switchgear:</b>									0	1					Without String connection (2-field) 11 kV + 22 kV 2 Ring connection (3-field) 11 kV + 22 kV Ring connection (3-field) 33 kV
<b>Surrounding area:</b>													1		Protection against chemically active substances
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Glen Waverley, Victoria, Australia

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 630SC-AU)**

Valid from: as provided in contract

<b>TCS 630SC-AU (price before options):</b>	1	AU	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -5° C to +50° C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				2											11 kV
				4											22 kV
				6											33 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0									Without
						1									With
<b>Internal power supply:</b>							0								Without
							1								With
<b>Communit:</b>								0							Without
								1							With
<b>Medium voltage switchgear:</b>									0						Without
									1						String connection (2-field) 11 kV + 22 kV
										2					Ring connection (3-field) 11 kV + 22 kV
															Ring connection (3-field) 33 kV
<b>Surrounding area:</b>												1			Protection against chemically active substances
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Glen Waverley, Victoria, Australia

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 500SC-AU)**

Valid from: as provided in contract

<b>TCS 500SC-AU (price before options):</b>	0	AU	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 22 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -5° C to +50° C.
<b>Cabinet:</b>			1												Steel compact station
<b>Voltage level:</b>				2											11 kV
				4											22 kV
				6											33 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0									Without
						1									With
<b>Internal power supply:</b>							0								Without
							1								With
<b>Communit:</b>								0							Without
								1							With
<b>Medium voltage switchgear:</b>									0						Without
									1						String connection (2-field) 11 kV + 22 kV
										2					Ring connection (3-field) 11 kV + 22 kV
															Ring connection (3-field) 33 kV
<b>Surrounding area:</b>												1			Protection against chemically active substances
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices apply for delivery ex works Glen Waverley, Victoria, Australia

EXW INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1600SC-RO)**

Valid from: as provided in contract

<b>TCS 1600SC-RO</b> (price before options):	5	RO	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>				0											20 kV
	<b>Medium voltage transformer:</b>				1											Transformer with iron core
					2											Transformer with amorphous core
	<b>LV power switch:</b>					0										Without
						1										With
	<b>Internal power supply:</b>						0									Without
							1									With
	<b>Communit:</b>							0								Without
								1								With
	<b>Medium voltage switchgear:</b>								0							Without
								1						String connection (2-field)		
								2						Ring connection (3-field)		
<b>Surrounding area:</b>									0					Standard		
									1					Protection against chemically active substances		
<b>Language:</b>													EN	English		
													RO	Romanian		

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Romania (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

RO) Version for Romania

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1250SC-RO)**

Valid from: as provided in contract

<b>TCS 1250SC-RO</b> (price before options):	4	RO	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>																
	<b>Cabinet:</b>			0													Concrete compact station
	<b>Voltage level:</b>				0												20 kV
	<b>Medium voltage transformer:</b>					1											Transformer with iron core
						2											Transformer with amorphous core
	<b>LV power switch:</b>						0										Without
							1										With
	<b>Internal power supply:</b>							0									Without
								1									With
	<b>Communit:</b>								0								Without
									1								With
	<b>Medium voltage switchgear:</b>									0							Without
									1						String connection (2-field)		
									2						Ring connection (3-field)		
<b>Surrounding area:</b>										0					Standard		
										1					Protection against chemically active substances		
<b>Language:</b>														EN	English		
														RO	Romanian		

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Romania (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

RO) Version for Romania

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 1000SC-RO)**

Valid from: as provided in contract

<b>TCS 1000SC-RO</b> (price before options):	3	RO	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>				0											20 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
					2										Transformer with amorphous core
<b>LV power switch:</b>						0									Without
						1									With
<b>Internal power supply:</b>							0								Without
							1								With
<b>Communit:</b>								0							Without
								1							With
<b>Medium voltage switchgear:</b>									0						Without
									1						String connection (2-field)
									2						Ring connection (3-field)
<b>Surrounding area:</b>										0					Standard
										1					Protection against chemically active substances
<b>Language:</b>													EN		English
													RO		Romanian

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Romania (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

RO) Version for Romania

The transport costs for release orders and/or orders of individual components will be charged separately.





**Transformer Compact Station for SC-CP-Inverter (TCS 800SC-RO)**

Valid from: as provided in contract

TCS 800SC-RO (price before options):	2	RO	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>				0											20 kV
	<b>Medium voltage transformer:</b>					1										Transformer with iron core
						2										Transformer with amorphous core
	<b>LV power switch:</b>						0									Without
							1									With
	<b>Internal power supply:</b>							0								Without
								1								With
	<b>Communit:</b>								0							Without
									1							With
	<b>Medium voltage switchgear:</b>									0						Without
									1					String connection (2-field)		
									2					Ring connection (3-field)		
<b>Surrounding area:</b>										0				Standard		
										1				Protection against chemically active substances		
<b>Language:</b>													EN	English		
													RO	Romanian		

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Romania (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

RO) Version for Romania

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 630SC-RO)**

Valid from: as provided in contract

TCS 630SC-RO (price before options):	1	RO	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>				0											20 kV
	<b>Medium voltage transformer:</b>				1											Transformer with iron core
					2											Transformer with amorphous core
	<b>LV power switch:</b>					0										Without
						1										With
	<b>Internal power supply:</b>						0									Without
							1									With
	<b>Communit:</b>							0								Without
								1								With
	<b>Medium voltage switchgear:</b>								0							Without
								1						String connection (2-field)		
								2						Ring connection (3-field)		
<b>Surrounding area:</b>									0					Standard		
									1					Protection against chemically active substances		
<b>Language:</b>													EN	English		
													RO	Romanian		

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Romania (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

RO) Version for Romania

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP-Inverter (TCS 500SC-RO)**

Valid from: as provided in contract

<b>TCS 500SC-RO</b> (price before options):	0	RO	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 20 kV, vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.		
	<hr/>															
	<b>Cabinet:</b>			0												Concrete compact station
	<b>Voltage level:</b>				0											20 kV
	<b>Medium voltage transformer:</b>					1										Transformer with iron core
						2										Transformer with amorphous core
	<b>LV power switch:</b>						0									Without
							1									With
	<b>Internal power supply:</b>							0								Without
								1								With
	<b>Communit:</b>								0							Without
									1							With
	<b>Medium voltage switchgear:</b>									0						Without
									1					String connection (2-field)		
									2					Ring connection (3-field)		
<b>Surrounding area:</b>										0				Standard		
										1				Protection against chemically active substances		
<b>Language:</b>													EN	English		
													RO	Romanian		

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Romania (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

RO) Version for Romania

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP inverter (TCS 1600SC-UK)**

Valid from: as provided in contract

<b>TCS 1600SC-UK (price before options):</b>	5	UK	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0											Concrete compact station
<b>Voltage level:</b>				2	6									11 kV 33 kV
<b>Medium voltage transformer:</b>				1										Transformer with iron core
<b>LV power switch:</b>					0	1								Without With
<b>Internal power supply:</b>						0	1							Without With
<b>Communit:</b>							0	1						Without With
<b>Medium voltage switchgear:</b>								0	1	2	3			Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV Ring connection (3-field) 11 kV, BS/ENA compliant Ring connection (3-field) 33 kV, BS/ENA compliant
<b>Surrounding area:</b>									0	1				Standard Protection against chemically active substances
<b>Language:</b>													EN	English

**Comments**

Excl. transport, transport insurance

Prices valid for delivery to UK port

CIF INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP inverter (TCS 1250SC-UK)**

Valid from: as provided in contract

<b>TCS 1250SC-UK (price before options):</b>	4	UK	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0											Concrete compact station
<b>Voltage level:</b>				2	6									11 kV 33 kV
<b>Medium voltage transformer:</b>				1										Transformer with iron core
<b>LV power switch:</b>					0	1								Without With
<b>Internal power supply:</b>						0	1							Without With
<b>Communit:</b>							0	1						Without With
<b>Medium voltage switchgear:</b>								0	1	2	3			Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV Ring connection (3-field) 11 kV, BS/ENA compliant Ring connection (3-field) 33 kV, BS/ENA compliant
<b>Surrounding area:</b>									0	1				Standard Protection against chemically active substances
<b>Language:</b>													EN	English

**Comments**

Excl. transport, transport insurance

Prices valid for delivery to UK port

CIF INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP inverter (TCS 1000SC-UK)**

Valid from: as provided in contract

<b>TCS 1000SC-UK (price before options):</b>	3	UK	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0											Concrete compact station
<b>Voltage level:</b>				2										11 kV 33 kV
<b>Medium voltage transformer:</b>					1									Transformer with iron core
<b>LV power switch:</b>						0								Without With
<b>Internal power supply:</b>							0							Without With
<b>Communit:</b>								0						Without With
<b>Medium voltage switchgear:</b>									0					Without
									1					String connection (2-field) 11 kV String connection (2-field) 33 kV
									2					Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV
									3					Ring connection (3-field) 11 kV, BS/ENA compliant Ring connection (3-field) 33 kV, BS/ENA compliant
<b>Surrounding area:</b>										0				Standard Protection against chemically active substances
<b>Language:</b>													EN	English

**Comments**

Excl. transport, transport insurance

Prices valid for delivery to UK port

CIF INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP inverter (TCS 800SC-UK)**

Valid from: as provided in contract

<b>TCS 800SC-UK (price before options):</b>	2	UK	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>				2											11 kV 33 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0									Without With
<b>Internal power supply:</b>							0								Without With
<b>Communit:</b>								0							Without With
<b>Medium voltage switchgear:</b>									0						Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV Ring connection (3-field) 11 kV, BS/ENA compliant Ring connection (3-field) 33 kV, BS/ENA compliant
<b>Surrounding area:</b>										0					Standard Protection against chemically active substances
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices valid for delivery to UK port

CIF INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP inverter (TCS 630SC-UK)**

Valid from: as provided in contract

<b>TCS 630SC-UK (price before options):</b>	1	UK	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>				0	6										11 kV 33 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
<b>LV power switch:</b>				0	1										Without With
<b>Internal power supply:</b>				0	1										Without With
<b>Communit:</b>				0	1										Without With
<b>Medium voltage switchgear:</b>								0	1	2	3				Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV Ring connection (3-field) 11 kV, BS/ENA compliant Ring connection (3-field) 33 kV, BS/ENA compliant
<b>Surrounding area:</b>								0	1						Standard Protection against chemically active substances
<b>Language:</b>													EN		English

**Comments**

Excl. transport, transport insurance

Prices valid for delivery to UK port

CIF INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.





**Transformer Compact Station for SC-CP inverter (TCS 500SC-UK)**

Valid from: as provided in contract

<b>TCS 500SC-UK (price before options):</b>	0	UK	x	x	x	x	x	x	x	x	x	0	0	xx	The compact station comes with an oil-hermetic transformer for 11 kV (33 kV), vector group Dy11y11, with reduced losses and is permitted for ambient temperatures from -20°C to +45°C.
<b>Cabinet:</b>			0												Concrete compact station
<b>Voltage level:</b>				2											11 kV 33 kV
<b>Medium voltage transformer:</b>					1										Transformer with iron core
<b>LV power switch:</b>						0									Without With
<b>Internal power supply:</b>							0								Without With
<b>Communit:</b>								0							Without With
<b>Medium voltage switchgear:</b>									0						Without String connection (2-field) 11 kV String connection (2-field) 33 kV Ring connection (3-field) 11 kV Ring connection (3-field) 33 kV Ring connection (3-field) 11 kV, BS/ENA compliant Ring connection (3-field) 33 kV, BS/ENA compliant
<b>Surrounding area:</b>										0					Standard Protection against chemically active substances
<b>Language:</b>														EN	English

**Comments**

Excl. transport, transport insurance

Prices valid for delivery to UK port

CIF INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP inverter (TCS 1800SC-EX)**

Valid from: as provided in contract

<b>TCS 1800SC-EX (price before options):</b>	x	x	x	1	x	x	x	x	x	x	x	x	x	x	The compact station in accordance with IEC 62271-202, incl. oil hermetical medium-voltage transformer for 20 kV, is licensed for operation at ambient temperatures ranging from -20 °C to 45 °C.
<b>Cabinet:</b>	1														Steel compact station
<b>Voltage level:</b>	0	1	2	3	4	8	9	A	B	C					20 kV 10 kV 11 kV 15 kV 22 kV 6,6 kV 12 kV 13,2 kV 13,8 kV 23 kV
<b>Power frequency:</b>	0	1													50 Hz 60 Hz
<b>Transformer vector group:</b>				1	3										Dy11y11 YNd11d11
<b>LV power switch:</b>				0	1										Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>						0	1								Without With
<b>Medium voltage switchgear:</b>							0	1	2	3					Without String connection (2-field) Ring connection (3-field) Ring connection (3-field) with circuit breaker
<b>Surrounding area:</b>								0	1						Standard Protection against chemically active substances
<b>Ambient temperature:</b>									0	1					Standard +50 °C
<b>Installation altitude:</b>										0	1				0 - 2000m 2000 - 4000m
<b>Language:</b>															EN English FR French ES Spanish DE German

**Comments**

FOB (Incoterms® 2010), German harbor

We will gladly handle the transportation to the destination port for you. The costs of this will be charged separately.

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP inverter (TCS 1600SC-EX)**

Valid from: as provided in contract

<b>TCS 1600SC-EX (price before options):</b>	x	x	x	1	x	x	x	x	x	x	x	x	x	x	The compact station in accordance with IEC 62271-202, incl. oil hermetical medium-voltage transformer for 20 kV, is licensed for operation at ambient temperatures ranging from -20 °C to 45 °C.
<b>Cabinet:</b>	1														Steel compact station
<b>Voltage level:</b>	0	1	2	3	4	8	9	A	B	C					20 kV 10 kV 11 kV 15 kV 22 kV 6,6 kV 12 kV 13,2 kV 13,8 kV 23 kV
<b>Power frequency:</b>	0	1													50 Hz 60 Hz
<b>Transformer vector group:</b>				1	3										Dy11y11 YNd11d11
<b>LV power switch:</b>				0	1										Without With
<b>Internal power supply:</b>						0	1								Without With
<b>Communit:</b>						0	1								Without With
<b>Medium voltage switchgear:</b>							0	1	2	3					Without String connection (2-field) Ring connection (3-field) Ring connection (3-field) with circuit breaker
<b>Surrounding area:</b>								0	1						Standard Protection against chemically active substances
<b>Ambient temperature:</b>								0	1						Standard +50 °C
<b>Installation altitude:</b>								0	1						0 - 2000m 2000 - 4000m
<b>Language:</b>															EN English FR French ES Spanish DE German

**Comments**

FOB (Incoterms® 2010), German harbor

We will gladly handle the transportation to the destination port for you. The costs of this will be charged separately.

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP inverter (TCS 900SC-EX)**

Valid from: as provided in contract

<b>TCS 900SC-EX (price before options):</b>	x	x	x	1	x	x	x	x	x	x	x	x	x	x	x	x		The compact station in accordance with IEC 62271-202, incl. oil hermetical medium-voltage transformer for 20 kV, is licensed for operation at ambient temperatures ranging from -20 °C to 45 °C.
<b>Cabinet:</b>	1																	Steel compact station
<b>Voltage level:</b>	0	1	2	3	4	8	9	A	B	C								20 kV 10 kV 11 kV 15 kV 22 kV 6,6 kV 12 kV 13,2 kV 13,8 kV 23 kV
<b>Power frequency:</b>	0	1																50 Hz 60 Hz
<b>Transformer vector group:</b>				1	3													Dy11y11 YNd11d11
<b>LV power switch:</b>				0	1													Without With
<b>Internal power supply:</b>						0	1											Without With
<b>Communit:</b>						0	1											Without With
<b>Medium voltage switchgear:</b>							0	1	2	3								Without String connection (2-field) Ring connection (3-field) Ring connection (3-field) with circuit breaker
<b>Surrounding area:</b>								0	1									Standard Protection against chemically active substances
<b>Ambient temperature:</b>									0	1								Standard +50 °C
<b>Installation altitude:</b>										0	1							0 - 2000m 2000 - 4000m
<b>Language:</b>																		EN English FR French ES Spanish DE German

**Comments**

FOB (Incoterms® 2010), German harbor

We will gladly handle the transportation to the destination port for you. The costs of this will be charged separately.

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer Compact Station for SC-CP inverter (TCS 800SC-EX)**

Valid from: as provided in contract

<b>TCS 800SC-EX (price before options):</b>	x	x	x	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	The compact station in accordance with IEC 62271-202, incl. oil hermetical medium-voltage transformer for 20 kV, is licensed for operation at ambient temperatures ranging from -20 °C to 45 °C.
<b>Cabinet:</b>	1																		Steel compact station
<b>Voltage level:</b>	0	1	2	3	4	8	9	A	B	C									20 kV 10 kV 11 kV 15 kV 22 kV 6,6 kV 12 kV 13,2 kV 13,8 kV 23 kV
<b>Power frequency:</b>	0	1																	50 Hz 60 Hz
<b>Transformer vector group:</b>				1	3														Dy11y11 YNd11d11
<b>LV power switch:</b>				0	1														Without With
<b>Internal power supply:</b>						0	1												Without With
<b>Communit:</b>						0	1												Without With
<b>Medium voltage switchgear:</b>							0	1	2	3									Without String connection (2-field) Ring connection (3-field) Ring connection (3-field) with circuit breaker
<b>Surrounding area:</b>								0	1										Standard Protection against chemically active substances
<b>Ambient temperature:</b>									0	1									Standard +50 °C
<b>Installation altitude:</b>										0	1								0 - 2000m 2000 - 4000m
<b>Language:</b>																			EN English FR French ES Spanish DE German

**Comments**

FOB (Incoterms® 2010), German harbor

We will gladly handle the transportation to the destination port for you. The costs of this will be charged separately.

Depending on country-specific requirements the price and technical parameters can vary.

The transport costs for release orders and/or orders of individual components will be charged separately.



**Transformer for SC-CP inverter (Transformer 1800kVA)**

Valid from: as provided in contract

<b>Transformer 1800kVA (price before options):</b>	7	x	x	x	x	x	x	x	x	x	Liquid-immersed three-phase transformer 1800 kVA in accordance with IEC 60076, licensed for operation at ambient temperatures ranging from -25 °C to 40 °C, nominal power 1800 kVA / 2 x 900 kVA, transmission ratio 20 kV / 0.405 kV, vector group Dy11y11, cooling method ONAN
<b>Voltage level:</b>	0										20 kV
	1										10 kV
	2										11 kV
	3										15 kV
	4										22 kV
	5										30 kV
	6										33 kV
	7										35 kV
	8										6,6 kV
	9										12 kV
	A										13,2 kV
B										13,8 kV	
C										23 kV	
D										24,94 kV	
E										31,5 kV	
F										34,5 kV	
<b>Power frequency:</b>	0										50 Hz
	1										60 Hz
<b>Cooling method:</b>	0										ONAN
	1										KNAN
<b>Transformer vector group:</b>	1										Dy11y11
	3										YNd11d11
<b>Mounting location:</b>	0										For indoor installation
	1										For outdoor installation
<b>Surrounding area:</b>	0										Standard
<b>Ambient temperature:</b>	0										Standard
	1										+50 °C
<b>Installation altitude:</b>	2										+55 °C
	0										0 - 2000m
<b>Language:</b>	1										2000 - 4000m
	EN										English
	FR										French
	ES										Spanish
	DE										German

**Comments**

FOB (Incoterms® 2010), German harbor

We will gladly handle the transportation to the destination port for you. The costs of this will be charged separately.



**Transformer for SC-CP inverter (Transformer 1600kVA)**

Valid from: as provided in contract

<b>Transformer 1600kVA (price before options):</b>	7	x	x	x	x	x	x	x	x	Liquid-immersed three-phase transformer 1600 kVA in accordance with IEC 60076, licensed for operation at ambient temperatures ranging from -25 °C to 40 °C, nominal power 1600 kVA / 2 x 800 kVA, transmission ratio 20 kV / 0.360 kV, vector group Dy11y11, cooling method ONAN
	0									20 kV
<b>Voltage level:</b>	1									10 kV
	2									11 kV
	3									15 kV
	4									22 kV
	5									30 kV
	6									33 kV
	7									35 kV
	8									6,6 kV
	9									12 kV
	A									13,2 kV
B									13,8 kV	
C									23 kV	
D									24,94 kV	
E									31,5 kV	
F									34,5 kV	
<b>Power frequency:</b>	0									50 Hz
	1									60 Hz
<b>Cooling method:</b>	0									ONAN
	1									KNAN
<b>Transformer vector group:</b>	1									Dy11y11
	3									YNd11d11
<b>Mounting location:</b>	0									For indoor installation
	1									For outdoor installation
<b>Surrounding area:</b>	0									Standard
<b>Ambient temperature:</b>	0									Standard
	1									+50 °C
	2									+55 °C
<b>Installation altitude:</b>	0									0 - 2000m
	1									2000 - 4000m
<b>Language:</b>	EN									English
	FR									French
	ES									Spanish
	DE									German

**Comments**

FOB (Incoterms® 2010), German harbor

We will gladly handle the transportation to the destination port for you. The costs of this will be charged separately.



**Transformer for SC-CP inverter (Transformer 900kVA)**

Valid from: as provided in contract

<b>Transformer 900kVA (price before options):</b>	7	x	x	x	x	x	x	x	x	Liquid-immersed three-phase transformer 900 kVA in accordance with IEC 60076, licensed for operation at ambient temperatures ranging from -25 °C to 40 °C, nominal power 900 kVA, transmission ratio 20 kV / 0.405 kV, vector group Dy11, cooling method ONAN
<b>Voltage level:</b>	0									20 kV
	1									10 kV
	2									11 kV
	3									15 kV
	4									22 kV
	5									30 kV
	6									33 kV
	7									35 kV
	8									6,6 kV
	9									12 kV
	A									13,2 kV
	B									13,8 kV
	C									23 kV
	D									24,94 kV
	E									31,5 kV
	F									34,5 kV
<b>Power frequency:</b>	0									50 Hz
	1									60 Hz
<b>Cooling method:</b>			0							ONAN
			1							KNAN
<b>Transformer vector group:</b>				0						Dy11
				2						YNd11
<b>Mounting location:</b>					0					For indoor installation
					1					For outdoor installation
<b>Surrounding area:</b>						0				Standard
<b>Ambient temperature:</b>							0			Standard
							1			+50 °C
							2			+55 °C
<b>Installation altitude:</b>								0		0 - 2000m
								1		2000 - 4000m
<b>Language:</b>									EN	English
									FR	French
									ES	Spanish
									DE	German

**Comments**

FOB (Incoterms® 2010), German harbor

We will gladly handle the transportation to the destination port for you. The costs of this will be charged separately.





**Transformer for SC-CP inverter (Transformer 800kVA)**

Valid from: as provided in contract

<b>Transformer 800kVA (price before options):</b>	7	x	x	x	x	x	x	x	x	x	Liquid-immersed three-phase transformer 800 kVA in accordance with IEC 60076, licensed for operation at ambient temperatures ranging from -25 °C to 40 °C, nominal power 800 kVA, transmission ratio 20 kV / 0.360 kV, vector group Dy11, cooling method ONAN
<b>Voltage level:</b>	0										20 kV
	1										10 kV
	2										11 kV
	3										15 kV
	4										22 kV
	5										30 kV
	6										33 kV
	7										35 kV
	8										6,6 kV
	9										12 kV
	A										13,2 kV
	B										13,8 kV
	C										23 kV
	D										24,94 kV
	E										31,5 kV
	F										34,5 kV
<b>Power frequency:</b>	0										50 Hz
	1										60 Hz
<b>Cooling method:</b>			0								ONAN
			1								KNAN
<b>Transformer vector group:</b>				0							Dy11
				2							YNd11
<b>Mounting location:</b>					0						For indoor installation
					1						For outdoor installation
<b>Surrounding area:</b>						0					Standard
<b>Ambient temperature:</b>							0				Standard
							1				+50 °C
							2				+55 °C
<b>Installation altitude:</b>								0			0 - 2000m
								1			2000 - 4000m
<b>Language:</b>									EN		English
									FR		French
									ES		Spanish
									DE		German

**Comments**

FOB (Incoterms® 2010), German harbor

We will gladly handle the transportation to the destination port for you. The costs of this will be charged separately.



## Sunny Central Accessories



**SC-XXX-CP-KIT-SMB** The SMB connection kit is part of the accessories to connect the Sunny Main Box to the following inverters:

SC 900CP-10  
 SC 850CP-10  
 SC 800CP-10  
 SC 760CP-10  
 SC 720CP-10  
 SC 630CP-10  
 SC 500CP-10

The busbar enables the connection of up to 4 DC cables.

**65-99006109** Concrete base for inverters (Country DE, UK):

SC 900CP-10  
 SC 850CP-10  
 SC 800CP-10  
 SC 760CP-10  
 SC 720CP-10  
 SC 630CP-10  
 SC 500CP-10

**65-99004111** Steel base for inverters (Country DE, GR):

SC 900CP-10  
 SC 850CP-10  
 SC 800CP-10  
 SC 760CP-10  
 SC 720CP-10  
 SC 630CP-10  
 SC 500CP-10

**65-99003121** Concrete base for inverters (Country IT, GR):

SC 900CP-10  
 SC 850CP-10  
 SC 800CP-10  
 SC 760CP-10  
 SC 720CP-10  
 SC 630CP-10  
 SC 500CP-10

**65-99005109** Concrete base for inverters (Country FR):

SC 900CP-10  
 SC 850CP-10  
 SC 800CP-10  
 SC 760CP-10  
 SC 720CP-10  
 SC 630CP-10  
 SC 500CP-10

**65-99004122** Concrete base for inverters (Country DE, CZ):

SC 900CP-10  
 SC 850CP-10  
 SC 800CP-10  
 SC 760CP-10  
 SC 720CP-10  
 SC 630CP-10  
 SC 500CP-10

**65-99007109** Concrete base for inverters (Country BG, RO, GR):

SC 900CP-10  
 SC 850CP-10  
 SC 800CP-10  
 SC 760CP-10  
 SC 720CP-10  
 SC 630CP-10  
 SC 500CP-10

**65-1519910010** Concrete base for inverters (Country ES):

SC 900CP-10  
 SC 850CP-10  
 SC 800CP-10  
 SC 760CP-10  
 SC 720CP-10  
 SC 630CP-10  
 SC 500CP-10

**65-1519910011** Concrete base for inverters (Country AU):

SC 900CP-10  
 SC 850CP-10  
 SC 800CP-10  
 SC 760CP-10  
 SC 720CP-10  
 SC 630CP-10  
 SC 500CP-10



<b>41-5326</b>	Cable set 5 m for TCS-SC (Countries DE, IT, FR, ES, CZ, BG, RO, GR)
<b>41-5327</b>	Cable set 7,5 m for TCS-SC (Countries DE, IT, FR, ES, CZ, BG, RO, GR)
<b>41-5328</b>	Cable set 10 m for TCS-SC (Countries DE, IT, FR, ES, CZ, BG, RO, GR)
<b>41-5329</b>	Cable set 15 m for TCS-SC (Countries DE, IT, FR, ES, CZ, BG, RO, GR)
<b>95-7319</b>	Cable set 10 m for TCS-SC (Country AU)
<b>95-7320</b>	Cable set 15 m for TCS-SC (Country AU)
<b>41-5336</b>	5-meter cable set for TCS-SC (IEC/EN Standard)
<b>41-5337</b>	7.5-meter cable set for TCS-SC (IEC/EN Standard)
<b>41-5338</b>	10-meter cable set for TCS-SC (IEC/EN Standard)
<b>41-5339</b>	15-meter cable set for TCS-SC (IEC/EN Standard)

# Central inverters





## Stations and Transformers



**Concrete station 1600MV-20 incl. transformer (SC 1600MV-20)**

Valid from: as provided in contract

<b>SC 1600MV-20 (price before options):</b>	5	DE	0	x	x	x	x	x	x	x	0	x	x	xx	Concrete station consisting of a walk-in multi-room station, with separate doors; dimensions and weights according to the station drawing; divided into: low voltage room prepared for installation of two inverters from production series SCxxxCP-10 (optional station installation), MS transformer room incl. a 1 600 kVA - 20/2*0.315-0.360 kV oil-hermetic transformer (other voltage levels optional), switch group Dy11y11; completely installed.
<b>Voltage level:</b>			0												20 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
				2											Transformer with amorphous core
<b>Internal power supply:</b>					0										Without
					1										With
<b>Communit:</b>						0									Without
						1									With
<b>Medium voltage switchgear:</b>							0								Without
							1								String connection (2-field)
							2								Ring connection (3-field)
<b>Surrounding area:</b>								0							Standard
								1							Protection against chemically active substances
<b>Inverter 1:</b>													C		SC 720CP-10
													D		SC 760CP-10
													E		SC 800CP-10
<b>Inverter 2:</b>													C		SC 720CP-10
													D		SC 760CP-10
													E		SC 800CP-10
<b>Language:</b>														DE	German
														EN	English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany



**Concrete station 1250MV-20 incl. transformer (SC 1250MV-20)**

Valid from: as provided in contract

<b>SC 1250MV-20 (price before options):</b>	4	DE	0	x	x	x	x	x	x	x	0	x	x	xx	Concrete station consisting of a walk-in multi-room station, with separate doors; dimensions and weights according to the station drawing; divided into: low voltage room prepared for installation of two inverters from production series SCxxxCP-10 (optional station installation), MS transformer room incl. a 1 260 kVA - 20/2*0.315 kV oil-hermetic transformer (other voltage levels optional), switch group Dy11y11; completely installed.
<b>Voltage level:</b>			0												20 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
				2											Transformer with amorphous core
<b>Internal power supply:</b>					0										Without
					1										With
<b>Communit:</b>						0									Without
						1									With
<b>Medium voltage switchgear:</b>							0								Without
							1								String connection (2-field)
							2								Ring connection (3-field)
<b>Surrounding area:</b>								0							Standard
								1							Protection against chemically active substances
<b>Inverter 1:</b>													B		SC 630CP-10
<b>Inverter 2:</b>													B		SC 630CP-10
<b>Language:</b>														DE	German
														EN	English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany





**Concrete station 1000MV-20 incl. transformer (SC 1000MV-20)**

Valid from: as provided in contract

<b>SC 1000MV-20 (price before options):</b>	3	DE	0	x	x	x	x	x	x	x	0	x	x	xx	Concrete station consisting of a walk-in multi-room station with separate doors; dimensions and weights according to the station drawing; divided into: low voltage room prepared for installation of two inverters from production series SCxxxCP-10 (optional station installation), MS transformer room incl. a 1 000 kVA - 20/2*0.270 kV oil-hermetic transformer (other voltage levels optional), switch group Dy11y11; completely installed.
<b>Voltage level:</b>			0												20 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
				2											Transformer with amorphous core
<b>Internal power supply:</b>					0										Without
					1										With
<b>Communit:</b>						0									Without
						1									With
<b>Medium voltage switchgear:</b>							0								Without
							1								String connection (2-field)
							2								Ring connection (3-field)
<b>Surrounding area:</b>								0							Standard
								1							Protection against chemically active substances
<b>Inverter 1:</b>													A		SC 500CP-10
<b>Inverter 2:</b>													A		SC 500CP-10
<b>Language:</b>														DE	German
														EN	English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany



**Concrete station 800MV-20 incl. transformer (SC 800MV-20)**

Valid from: as provided in contract

<b>SC 800MV-20 (price before options):</b>	2	DE	0	x	x	x	x	x	x	x	0	x	x	xx	Concrete station consisting of a walk-in multi-room station with separate doors; dimensions and weights according to the station drawing; divided into: low voltage room prepared for installation of one inverter from production series SCxxxCP-10 (optional station installation), MS transformer room incl. a 800 kVA - 20/0.315-0.360 kV oil-hermetic transformer (other voltage levels optional), switch group Dy11; completely installed.
<b>Voltage level:</b>			0												20 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
				2											Transformer with amorphous core
<b>Internal power supply:</b>					0										Without
					1										With
<b>Communit:</b>						0									Without
						1									With
<b>Medium voltage switchgear:</b>							0								Without
							1								String connection (2-field)
							2								Ring connection (3-field)
<b>Surrounding area:</b>								0							Standard
								1							Protection against chemically active substances
<b>Inverter 1:</b>													C		SC 720CP-10
													D		SC 760CP-10
													E		SC 800CP-10
<b>Inverter 2:</b>														0	Without
<b>Language:</b>															DE German
															EN English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany



**Concrete station 630MV-20 incl. transformer (SC 630MV-20)**

Valid from: as provided in contract

<b>SC 630MV-20 (price before options):</b>	1	DE	0	x	x	x	x	x	x	x	0	x	x	xx	Concrete station consisting of a walk-in multi-room station, with separate doors; dimensions and weights according to the station drawing; divided into: low voltage room prepared for installation of one inverter from production series SCxxxCP-10 (optional station installation), MS transformer room incl. a 630 kVA - 20/0.315 kV oil-hermetic transformer (other voltage levels optional), switch group Dy11; completely installed.
<b>Voltage level:</b>			0												20 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
				2											Transformer with amorphous core
<b>Internal power supply:</b>					0										Without
					1										With
<b>Communit:</b>						0									Without
						1									With
<b>Medium voltage switchgear:</b>							0								Without
							1								String connection (2-field)
							2								Ring connection (3-field)
<b>Surrounding area:</b>								0							Standard
								1							Protection against chemically active substances
<b>Inverter 1:</b>													B		SC 630CP-10
<b>Inverter 2:</b>														0	Without
<b>Language:</b>															DE German
															EN English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany



**Concrete station 500MV-20 incl. transformer (SC 500MV-20)**

Valid from: as provided in contract

<b>SC 500MV-20 (price before options):</b>	0	DE	0	x	x	x	x	x	x	x	0	x	x	xx	Concrete station consisting of a walk-in multi-room station, with separate doors; dimensions and weights according to the station drawing; divided into: low voltage room prepared for installation of one inverter from production series SCxxxCP-10 (optional station installation), MS transformer room incl. a 500 kVA - 20/0.270 kV oil-hermetic transformer (other voltage levels optional), switch group Dy11; completely installed.
<b>Voltage level:</b>			0												20 kV
<b>Medium voltage transformer:</b>				1											Transformer with iron core
				2											Transformer with amorphous core
<b>Internal power supply:</b>					0										Without
					1										With
<b>Communit:</b>						0									Without
						1									With
<b>Medium voltage switchgear:</b>							0								Without
							1								String connection (2-field)
							2								Ring connection (3-field)
<b>Surrounding area:</b>								0							Standard
								1							Protection against chemically active substances
<b>Inverter 1:</b>													B		SC 500CP-10
<b>Inverter 2:</b>														0	Without
<b>Language:</b>															DE German
															EN English

**Comments**

Incl. transport, transport insurance and off-loading in the excavation prepared customer-side. The customer guarantees unlimited access to the off-loading site.

Prices valid for delivery within Germany (not including islands).

CIP INCOTERMS® 2010

Depending on country-specific requirements the price and technical parameters can vary.

DE) Version for Germany



## Sunny Central System Technology



**Sunny Main Box (SMB)**

Valid from: as provided in contract

<b>SMB (price before options):</b>		x	x	x	x	Main DC-distribution with fuses for the single-pole connection of up to 8 Sunny String Monitors, weatherproof housing for outdoor use, up to 8 NH-fuses, cables are lead into the enclosure with metric cable glands.
<b>Device type:</b>		0				1 x 8 Inputs (max. 160 A)
<b>DC connection:</b>		0				14 - 28 mm (3 x M40 cable screw connection)
		1				27 - 36 mm (2 x M50 cable screw connection)
<b>Fuses:</b>		0				80 A
		1				100 A
		2				125 A
		3				160 A
<b>Language:</b>					0	German
					1	English
					2	Spanish
					3	Korean
					4	Italian
					5	French
					6	Chinese
				8	Czech	
				9	Greek	



## Sunny Main Box Cabinet (SMB-C)

Valid from: as provided in contract

<b>SMB-C (price before options):</b>	x	x	x	x	Main DC-distribution (standing cabinet) with fuses for both polarities for the connection of up to 8 Sunny String Monitors, weatherproof housing for the external units, separate access via door for each potential, doors with triple locks and swing arm lock for profile half cylinder (can be supplied on site).
<b>Device type:</b>	0				2 x 8 inputs (max. 160 A)
	1				2 x (2 x 3) inputs (max. 200 A)
	2				2 x (2 x 4) inputs (max. 160 A)
<b>DC connection:</b>	0				Fuses in plus and minus
	1				Fuses in plus, isolating blades in minus
	2				Fuses in minus, isolating blades in plus
<b>Fuses:</b>	0				80 A
	1				100 A
	2				125 A
	3				160 A
	4				200 A
<b>Language:</b>	0				German
	1				English
	2				Spanish
	3				Korean
	4				Italian
	5				French
	6				Chinese
	8				Czech
	9				Greek



## Sunny String Monitor (SSM)

Valid from: as provided in contract

<b>SSM (price before options):</b>	x	x	x	x	x	DC distribution with 8 current sensors and fuses for both polarities, incl. thermally monitored overvoltage protection. Optional connection via spring type clamp or SUNCLIX, optional switch-disconnector for output, weatherproof enclosure for outdoor use, communication unit RS485 for data transmission and evaluation with Sunny Central inverters.
<b>Device type:</b>	0					insulated
	1					Negative ground connection
	2					Positive ground connection
<b>DC switch:</b>	0					no
	1					Yes, without remote disconnection
	2					Yes, incl. remote disconnection via undervoltage release
	3					Yes, incl. remote disconnection via shunt trip
<b>String connection:</b>	4					2 x 16 screw connection (5 mm)
	5					2 x 16 screw connection (7 mm)
	6					2 x 16 screw connection (9 mm)
	9					Without
	A					2 x 8 SUNCLIX
	B					2 x 16 SUNCLIX
<b>String fuse:</b>	0					10 A (1000 V DC)
	1					12 A (1000 V DC)
	2					16 A (1000 V DC)
	3					20 A (1000 V DC)
	4					25 A (900 V DC)
	5					25 A (1000 V DC)
<b>Language:</b>	0					German
	1					English
	2					Spanish
	3					Korean
	4					Italian
	5					French
	6					Chinese
	7					Polish
	8					Czech
	9					Greek





**SMA String Combiner (SSC-10)**

Valid from: as provided in contract

<b>SSC-10 (price before options):</b>	x	x	x	x	x	x	xx	DC distribution board with 12 fuses for both polarities, incl. DC switch. Optimized for use with central inverters that are equipped with Optiprotect string failure detection.
<b>Version:</b>	0							insulated
	1							Negative ground connection
	2							Positive ground connection
<b>String fuse:</b>	0							10 A (1000 V DC)
	1							12 A (1000 V DC)
	2							15 A (1000 V DC)
	3							20 A (1000 V DC)
	9							Without
<b>DC switch:</b>	0							DC switch without remote disconnection
	1							DC switch incl. remote disconnection via undervoltage release
<b>String connection:</b>			0					Single cable glands
			1					Double cable glands
			2					Single SUNCLIX
			3					Double SUNCLIX
<b>Cable glands with sealing area:</b>			0					Without
			1					5.0 to 5.5 mm
			2					5.6 to 6.0 mm
			3					6.1 to 7.0 mm
			4					7.1 to 8.0 mm
			5					8.1 to 9.0 mm
<b>Surge Arrester:</b>						0		Without
						1		Typ 2
<b>Language:</b>							DE	German
							EN	English
							ES	Spanish
							KR	Korean
							IT	Italian
							FR	French
							CN	Chinese
							PL	Polish
							CZ	Czech
							GR	Greek
							PT	Portuguese
							NL	Dutch



## Sunny String Monitor SSM8-21

Valid from: as provided in contract

<b>SSM8-21 (price before options):</b>	x	x	x	x	x	x	x	x	xx	DC distribution board with 8 current sensors and optional fuses for both polarities, thermally monitored overvoltage protection and DC switch. String current measurement of all 8 channels incl. RS485 communication unit for data transmission and data evaluation in Sunny Central.
<b>Cabinet:</b>	0 1									Wall mounting Enclosure with base
<b>Version:</b>	0 1 2									insulated Negative ground connection Positive ground connection
<b>Number of strings/fuses: (per pole)</b>		0 1 2 3 4 6 8 9								8/8 16/8 24/8 16/16 32/16 24/24 32/32 48/48
<b>String input:*</b>			0 1 2 3 4 5 6 7 9							Kabelversch. 5,0 bis 5,5 mm Cable glands/ 5.6 to 6.0 mm Cable glands/ 6.1 to 7.0 mm Cable glands/ 7.1 to 8.0 mm Cable glands/ 8.1 to 9.0 mm Cable glands/ 9.1 to 10.0 mm Sunclix 6 mm <sup>2</sup> Sunclix 16mm <sup>2</sup> open base plate 1)
<b>String fuse:**</b>				0 1 2 3 4 5 6 7 9						6 A (1000 V) 8 A (1000 V) 10 A (1000 V) 12 A (1000 V) 15 A (1000 V) 20 A (1000 V) 25 A (1000 V) 30 A (1000 V) Without fuses
<b>DC switch:</b>					0 1 3 5					Without 200 A 200 A incl. signal contact 200 A incl. remote disconnection via undervoltage release
<b>Surge Arrester:</b>					0 2 3					Without Type 2 Type 1+2
<b>DC output:</b>						0 1 2 3				Busbar single Busbar double Cage clamp single Cage clamp double
<b>Language:</b>										DE German EN English ES Spanish KR Korean IT Italian FR French CN Chinese PL Polish CZ Czech GR Greek PT Portuguese NL Dutch JP Japanese

\*Price per strings

\*\*Price per fuse

1) Only for enclosure with socket, no plug connectors or cable glands



**Sunny String Monitor SSM16-21**

Valid from: as provided in contract

<b>SSM16-21 (price before options):</b>	x	x	x	x	x	x	x	x	xx	DC distribution board with 16 current sensors and optional fuses for both polarities, thermally monitored overvoltage protection and DC switch. String current measurement of all 16 channels incl. RS485 communication unit for data transmission and data evaluation in Sunny Central.
<b>Cabinet:</b>	0									Wall mounting
	1									Enclosure with base
<b>Version:</b>		0								insulated
		1								Negative ground connection
		2								Positive ground connection
<b>Number of strings/fuses: (per pole)</b>			3							16/16
			4							32/16
			5							48/16
			8							32/32
			9							48/48
<b>String input:*</b>				0						Kabelversch. 5,0 bis 5,5 mm
				1						Cable glands/ 5.6 to 6.0 mm
				2						Cable glands/ 6.1 to 7.0 mm
				3						Cable glands/ 7.1 to 8.0 mm
				4						Cable glands/ 8.1 to 9.0 mm
				5						Cable glands/ 9.1 to 10.0 mm
				6						Sunclix 6 mm <sup>2</sup>
				7						Sunclix 16mm <sup>2</sup>
				9						open base plate 1)
<b>String fuse:**</b>					0					6 A (1000 V)
					1					8 A (1000 V)
					2					10 A (1000 V)
					3					12 A (1000 V)
					4					15 A (1000 V)
					5					20 A (1000 V)
					6					25 A (1000 V)
					7					30 A (1000 V)
					9					Without fuses
<b>DC switch:</b>						0				Without
						1				200 A
						2				280 A
						3				200 A incl. signal contact
						4				280 A incl. signal contact
						5				200 A incl. remote disconnection via undervoltage release
						6				280 A incl. remote disconnection via undervoltage release
<b>Surge Arrester:</b>							0			Without
							2			Type 2
							3			Type 1+2
<b>DC output:</b>								0		Busbar single
								1		Busbar double
								2		Cage clamp single
								3		Cage clamp double
<b>Language:</b>										DE German
										EN English
										ES Spanish
										KR Korean
										IT Italian
										FR French
										CN Chinese
										PL Polish
										CZ Czech
										GR Greek
										PT Portuguese
										NL Dutch
										JP Japanese

\*Price per strings

\*\*Price per fuse

1) Only for enclosure with socket, no plug connectors or cable glands



## Sunny String Monitor SSM24-21

Valid from: as provided in contract

<b>SSM24-21 (price before options):</b>	x	x	x	x	x	x	x	x	xx	DC distribution board with 24 current sensors and optional fuses for both polarities, thermally monitored overvoltage protection and DC switch. String current measurement of all 24 channels incl. RS485 communication unit for data transmission and data evaluation in Sunny Central.
<b>Cabinet:</b>	0 1									Wall mounting Enclosure with base
<b>Version:</b>		0 1 2								insulated Negative ground connection Positive ground connection
<b>Number of strings/fuses: (per pole)</b>			6 7 9							24/24 48/24 48/48
<b>String input:*</b>				0 1 2 3 4 5 6 7 9						Kabelversch. 5,0 bis 5,5 mm Cable glands/ 5.6 to 6.0 mm Cable glands/ 6.1 to 7.0 mm Cable glands/ 7.1 to 8.0 mm Cable glands/ 8.1 to 9.0 mm Cable glands/ 9.1 to 10.0 mm Sunclix 6 mm <sup>2</sup> Sunclix 16mm <sup>2</sup> open base plate 1)
<b>String fuse:**</b>					0 1 2 3 4 5 6 7 9					6 A (1000 V) 8 A (1000 V) 10 A (1000 V) 12 A (1000 V) 15 A (1000 V) 20 A (1000 V) 25 A (1000 V) 30 A (1000 V) Without fuses
<b>DC switch:</b>						0 1 2 3 4 5 6				Without 200 A 280 A 200 A incl. signal contact 280 A incl. signal contact 200 A incl. remote disconnection via undervoltage release 280 A incl. remote disconnection via undervoltage release
<b>Surge Arrester:</b>							0 2 3			Without Type 2 Type 1+2
<b>DC output:</b>								0 1 2 3		Busbar single Busbar double Cage clamp single Cage clamp double
<b>Language:</b>										DE German EN English ES Spanish KR Korean IT Italian FR French CN Chinese PL Polish CZ Czech GR Greek PT Portuguese NL Dutch JP Japanese

\*Price per strings

\*\*Price per fuse

1) Only for enclosure with socket, no plug connectors or cable glands



**Communit**

Valid from: as provided in contract

<b>Communit-10</b>	x	x	x	x	x	x	x	x	xx	Communication distribution box for up to 7 communication components, incl. 24 V power supply for connection to 100 ... 240 V AC, 45 ... 65 Hz.
<b>Cabinet:</b>	0									Wall mounting
	1									Base Mounting
	2									Mast mounting
	3									Mounting in a station
<b>Installation location 1</b>	0									Without
	1									WebBox Ethernet
	2									WebBox RS485
	4									Power Reducer Box
<b>Installation location 2</b>	0									Without
	1									WebBox Ethernet
	2									WebBox RS485
	3									WebBox + SensorBox *1
	4									Power Reducer Box
<b>Installation location 3</b>	0									Without
	1									WebBox Ethernet
	2									WebBox RS485
	3									WebBox + SensorBox *1
	7									Customer installation location
<b>Network installation location 4</b>	0									Without
	1									Switch 8 TX
	2									Switch 2 FX-M (SC) 8 TX
	3									Switch 2 FX-S (SC) 8 TX
	B									Switch 2 FX-M (SC) 6 TX MNG
	C									Switch 2 FX-S (SC) 6 TX MNG
	D									Switch 2 FX-M (SC) 14 TX MNG
	F									Switch 2 FX-S (SC) 14 TX MNG
<b>Network installation location 5</b>	0									Without
	1									Switch 8 TX
	2									Switch 2 FX-M (SC) 8 TX
	3									Switch 2 FX-S (SC) 8 TX
	B									Switch 2 FX-M (SC) 6 TX MNG
	C									Switch 2 FX-S (SC) 6 TX MNG
	D									Switch 2 FX-M (SC) 14 TX MNG
	F									Switch 2 FX-S (SC) 14 TX MNG
<b>Router:</b>	0									Without
	1									Ethernet
	2									UMTS/GSM/GPRS**
<b>Power Supply:</b>	0									Power supply unit, redundant
	2									Power supply unit redundant, buffered
<b>Patch panel:</b>	0									no
	4									Optical fiber splice box SC
<b>Language:</b>										DE German
										EN English
										ES Spanish
										KR Korean
										IT Italian
										FR French
										CN Chinese
										PL Polish
										CZ Czech
										GR Greek
										PT Portuguese
										NL Dutch
										JP Japanese

**Comments**

\*1 It is not possible to combine options. Only option 3/3 or 4/3 can be selected.

\*\* not to be used in Japan



**GSM-UMTS-OUTAN**

Antenna with a 5 m cable and an SMA plug for GSM and UMTS

# Communication





**Sunny Home Manager with Bluetooth® (HM-BT-10)**

Valid from: as provided in contract

<b>HM-BT-10 (price before options):</b>	x	x	Sunny Home Manager with Bluetooth® - wireless plant monitoring and intelligent energy management
<b>Power supply:</b>	1		with power supply
<b>Language:</b>		1	Germany , France , Italy , Spain , Czech Republic , Belgium , Netherlands , Greece , Portugal , Austria , Switzerland
		3	Great Britain , Australia

**Sunny Home Manager with Bluetooth® set incl. SMA radio-controlled sockets (HM-BT-10-Set)**

Valid from: as provided in contract

<b>HM-BT-10-SET (price before options):</b>	x	xx	x	Set consisting of Sunny Home Manager with Bluetooth® and two SMA radio-controlled sockets
<b>Power supply:</b>	1			with power supply
<b>Male connector:</b>		01		Type of connector CEE7/4; Germany , Austria , Netherlands , Portugal , Greece , Italy , Spain
<b>Language:</b>			1	Germany , Italy , Spain , Netherlands , Greece , Portugal , Austria , Switzerland

**SMA radio-controlled socket with Bluetooth® (BT-SOCKET-10)**

Valid from: as provided in contract

<b>BT-SOCKET-10 (price before options):</b>	xx			SMA radio-controlled socket with Bluetooth® - wireless control and energy measurement of loads and increase of Bluetooth® range
<b>Male connector; Language:</b>		01		Type of connector CEE7/4; Germany , Austria , Netherlands , Portugal , Greece , Italy , Spain

**SMA radio-controlled socket value pack (BT-SOCKETSET5-10)**

Valid from: as provided in contract

<b>BT-SOCKET-SET5-10 (price before options):</b>	xx			SMA radio-controlled socket with Bluetooth® Value pack with 5 SMA radio-controlled sockets
<b>Male connector; Language:</b>		01		Type of connector CEE7/4; Germany , Austria , Netherlands , Portugal , Greece , Italy , Spain

**HM-DO-METERADAPTER** Adapter to read out the optical meter interface according to IEC 62056-21 (D0) with 4-pole plug





**SMA Cluster Controller (CLCON-10)**

Valid from: as provided in contract

<b>CLCON-10 (price before options):</b>	x	SMA Cluster Controller Device for the monitoring and control of SMA inverters in decentralized large-scale PV plants with Speedwire network LC display, top-hat rail mounted  Availability: on inquiry
<b>Language:</b>	1	Germany , France, Italy , Spain , Czech Republic , Belgium , Netherlands , Greece , Portugal , Austria, Switzerland

**CLCON-PWRSUPPLY** Top-hat rail power supply unit 24 V DC / 2.5 A  
power supply unit for the SMA Cluster Controller, top-hat rail mounted, Input: 100-240 V AC, output: 24 V DC / 2.5 A

**USB-FLASHDRV4GB** USB memory stick 4 GB  
High Speed USB 2.0 Flash memory, highly reliable industrial quality, water- and dust proof, ESD protected, operating temperature -40°C ... +85°C

**USB-FLASHDRV8GB** USB memory stick 8 GB  
High Speed USB 2.0 Flash memory, highly reliable industrial quality, water- and dust proof, ESD protected, operating temperature -40°C ... +85°C



**Sunny View**

Valid from: as provided in contract

<b>VIEW-10</b>	Sunny View Color touch display for plant monitoring of up to 12 SMA inverters
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**Sunny Beam with Bluetooth®**

Valid from: as provided in contract

<b>BEAM-BT-11 (price before options):</b>	xx Sunny Beam with Bluetooth® Wireless Technology Wireless plant monitoring for up to 12 Sunny Boy and/or Sunny Mini Central inverters, incl. USB cable
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<b>Language:</b>	AU Australia (Documentation: English) BE Belgium (Documentation: German, Dutch, French) CZ Czech Republic (Documentation: Czech) DE Germany (Documentation: German) ES Spain (Documentation: Spanish) FR France (Documentation: French) GB Great Britain (Documentation: English) GR Greece (documentation: Greek) IT Italy (Documentation: Italian) NL Netherlands (Documentation: Dutch) PT Portugal (Documentation: Portuguese) US USA (Documentation: English)
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**BEAM-BT-BATTERY**      2 NiMH spare batteries for Sunny Beam with Bluetooth®, rechargeable

**BEAM-BT-SUPPLY**      USB plug-in power supply to charge the Sunny Beam batteries (EU, US, UK)

**SBEAM-BAT**  
Spare batteries (2 pcs.) for Sunny Beam (868/917 MHz), rechargeable

**BEAM-AW15**  
External antenna kit with 1.5 m extension cord for BEAM 868/917 MHz

**BEAM-AW100**  
External antenna kit with 10 m extension cord for BEAM 868/917 MHz



**SMA Bluetooth® Repeater**

Valid from: as provided in contract

<b>BTREP-IN (price before options):</b>	x	xx	SMA Bluetooth® repeater for increasing the range of SMA Bluetooth® products for use indoors
<b>Power supply:</b>	1		with plug-in power supply
	2		Power Modul, without plug-in power supply, not for USA
<b>Language:</b>	AU		Australia (Documentation: English)
	BE		Belgium (Documentation: German, Dutch, French)
	CZ		Czech Republic (Documentation: Czech)
	DE		Germany (Documentation: German)
	ES		Spain (Documentation: Spanish)
	FR		France (Documentation: French)
	GB		Great Britain (Documentation: English)
	GR		Greece (documentation: Greek)
	IT		Italy (Documentation: Italian)
	NL		Netherlands (Documentation: Dutch)
PT		Portugal (Documentation: Portuguese)	
US		USA (Documentation: English)	

Valid from: as provided in contract

<b>BTREP-OUT (price before options):</b>	x	xx	SMA Bluetooth® Repeater Outdoor for increasing the range of SMA Bluetooth® products for use outdoors
<b>Power supply:*</b>	1		with power supply for DIN rail mounting
	2		Power Modul, without power supply for DIN rail mounting
<b>Language:</b>		DE	Germany (Documentation: German)

\* The option 2 is not valid for the US



**PWRM-10-NR** Module for the power supply of the SMA Bluetooth® Repeater or the SMA Power Injector with Bluetooth® from the new Sunny Boy inverters

**PWRSUPPLY** Plug-in power supply (EU, US, UK, AU, KR) for SMA Bluetooth® Repeater, Sunny WebBox, Power Reducer Box, Power Injector of the Sunny SensorBox and Wireless-Set 485-01/02 radio set

**Power Reducer Box**

Valid from: as provided in contract

<b>POWERREDUCER BOX (price before options):</b>	x	x	xx	Power Reducer Box control device for feed-in and grid management in large-scale PV plants.
<b>Inputs:</b>	1			4 digital inputs
<b>Memory Card:</b>		0		none
		4		2 GB SDcard
<b>Language:</b>				DE Germany (documentation: German) AU Australia (documentation: English) CZ Czech Republic (documentation: Czech) ES Spain (documentation: Spanish)



**Sunny WebBox**

Valid from: as provided in contract

<b>SUNNYWEBBOX (price before options):</b>	x	x	x	xx	Sunny WebBox Central measurement data acquisition and diagnostic unit for the professional monitoring of the PV plant
<b>SMA COM:</b>	0				Without (Communication via Ethernet) RS485
<b>AUX COM:</b>	0				Without (Communication via Ethernet)
	3				Modem analog
	5				Modem GSM
	6				Modem GSM, incl. SIM card *3)
<b>Memory Card:</b>		0			none
		3			1 GB SD Card
		4			2 GB SD Card
<b>Language:</b>				AU	Australia (documentation: English)
				BE	Belgium (documentation: German, Dutch, French)
				CZ	Czech Republic (documentation: Czech)
				DE	Germany (documentation: German)
				ES	Spain (documentation: Spanish)
				FR	France (documentation: French)
				GB	Great Britain (documentation: English)
				GR	Greece (documentation: Greek)
				IT	Italy (documentation: Italian)
				KR	Korea (documentation: Korean)
				NL	Netherlands (documentation: Dutch)
				PT	Portugal (documentation: Portuguese)

\*3) Notice: T-Mobile card contract only available for Germany

**Sunny WebBox with Bluetooth®**

Valid from: as provided in contract

<b>WEBBOX-BT-20 (price before options):</b>	x	x	x	xx	Sunny WebBox with Bluetooth® Wireless Technology Central measurement data acquisition and diagnostic unit for the professional monitoring of the PV plant
<b>SMA COM:</b>	0				incl. Bluetooth® Wireless Technology
<b>Memory Card:</b>		0			none
		3			1 GB SD Card
		4			2 GB SD Card
<b>Language:</b>				AU	Australia (documentation: English)
				BE	Belgium (documentation: German, Dutch, French)
				CZ	Czech Republic (documentation: Czech)
				DE	Germany (documentation: German)
				ES	Spain (documentation: Spanish)
				FR	France (documentation: French)
				GB	Great Britain (documentation: English)
				GR	Greece (documentation: Greek)
				IT	Italy (documentation: Italian)
				NL	Netherlands (documentation: Dutch)
				PT	Portugal (documentation: Portuguese)
				US	USA (documentation: English)



**SWB-OUTANGSM 100** GSM antenna supplementary set for mounting the Sunny WebBox GSM antenna outside, incl. 10 m cable and mounting angle

**SD-Card 1 GB** 1 GB Secure Digital Memory Card for Sunny WebBox, I-Grade

**SD-Card 2 GB** 2 GB Secure Digital Memory Card for Sunny WebBox, I-Grade (for Sunny WebBox Firmware 1.42)

**SIMCARD T-Mobile** GSM cellular phone network data card for use with Sunny WebBox, incl. contract form sheet and documentation  
NOTICE: Only available for Germany!

**SUNNYWEBBOX-DUMMY** Sunny WebBox Demo, no function

**WEBBOX-20-DUMMY** Non-functioning dummy for Sunny WebBox with Bluetooth®

**Meter Connection Box**

Valid from: as provided in contract

<b>METER CONNECTIONBOX (price before options):</b>	xx	Device for the transmission of meter pulses of an energy meter with SO impulse output on the Sunny WebBox via the RS485 communication bus.
<b>Language:</b>		DE Germany (documentation: German) GB Great Britain (documentation: English) ES Spain (documentation: Spanish) BE Belgium (documentation: German, Dutch, French) IT Italy (documentation: Italian) FR France (documentation: French) AU Australia (documentation: English) CZ Czech Republic (documentation: Czech) GR Greece (documentation: Greek) NL Netherlands (documentation: Dutch) PT Portugal (documentation: Portuguese)



**Sunny SensorBox**

Valid from: as provided in contract

<p><b>SUNNYSENSOR (price before options):</b></p>	<p>x x xx</p>	<p>Sunny SensorBox Measuring system for environmental data capture for professional monitoring of the PV plant, incl. integrated irradiation and external module temperature sensor</p>
<p><b>SMA Power-Injector:*</b></p>	<p>1  2  3</p>	<p>RS485 Power Injector Feed-in unit for power supply via the RS485 communication bus, incl. plug-in power supply and installation</p> <p>SMA Power Injector with BLUETOOTH® Feed-in and communication unit for power supply via the RS485 communication bus and connection to the Sunny SensorBox to the SMA Bluetooth communication, incl. plug-in power supply and mounting material</p> <p>SMA Power Injector with BLUETOOTH® incl. Power Modul Feed-in and communication unit for power supply via the RS485 communication bus and connection to the Sunny SensorBox to the SMA Bluetooth communication, incl. Power Modul for power supply from the SB 3/4/5000TL-20, SB 3/4/5000TL-21, STP 8/10/12/15/17000TL-10, WB 3600TL-20 and 5000TL-20 (instead of plug-in power supply) and mounting material</p>
<p><b>Mounting plate:</b></p>	<p>0 1</p>	<p>Without Mounting plate for mounting the Sunny SensorBox on module rail</p>
<p><b>Language:</b></p>		<p>AU Australia (documentation: English) BE Belgium (documentation: German, Dutch, French) CZ Czech Republic (documentation: Czech) DE Germany (documentation: German) ES Spain (documentation: Spanish) FR France (documentation: French) GB Great Britain (documentation: English) GR Greece (documentation: Greek) IT Italy (documentation: Italian) KR Korea (documentation: Korean) NL Netherlands (documentation: Dutch) PT Portugal (documentation: Portuguese) US USA (documentation: English)</p>

\* The options 2 + 3 with Bluetooth are not valid for Korea

**SEALKIT-SENSOR** Set of replacement sealings for the Sunny SensorBox consisting of 1 x enclosure sealing and 6 x cable gland incl. corresponding sealings



Valid from: as provided in contract

<b>WINDSENSOR (price before options):</b>	xx Wind speed sensor for connection to Sunny SensorBox; 0.8 ... 40 m/s, incl. 3 m connection cable, mounting angle and pole clamp
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<b>Language:</b>	AU Australia (documentation: English) BE Belgium (documentation: German, Dutch, French) CZ Czech Republic (documentation: Czech) DE Germany (documentation: German) ES Spain (documentation: Spanish) FR France (documentation: French) GB Great Britain (documentation: English) GR Greece (documentation: Greek) IT Italy (documentation: Italian) KR Korea (documentation: Korean) NL Netherlands (documentation: Dutch) PT Portugal (documentation: Portuguese) US USA (documentation: English)
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**Wall-Mount-Bracket** wall mounting angle for mounting the wind speed sensor to wall, length 35 cm/90°

Valid from: as provided in contract

<b>TEMPSENSOR-AMBIENT (price before options):</b>	xx PT100 ambient temperature sensor for Sunny SensorBox, measuring range -30°C to 80°C incl. mounting materials
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<b>Language:</b>	AU Australia (documentation: English) BE Belgium (documentation: German, Dutch, French) CZ Czech Republic (documentation: Czech) DE Germany (documentation: German) ES Spain (documentation: Spanish) FR France (documentation: French) GB Great Britain (documentation: English) GR Greece (documentation: Greek) IT Italy (documentation: Italian) KR Korea (documentation: Korean) NL Netherlands (documentation: Dutch) PT Portugal (documentation: Portuguese) US USA (documentation: English)
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**TEMPSENSOR-MODULE** PT100 module temperature sensor for Sunny SensorBox, incl. 2-component thermally conductive adhesive and 2.5 m connection cable

**Monplat-Sensor** Mounting plate for mounting the Sunny SensorBox on module rail

**Roofan-Sensor** Roof bracket for mounting the Sunny SensorBox

Valid from: as provided in contract

<b>METEOSTATION-10 (price before options):</b>	SMA Meteo Station x professional compact weather station with pyranometer for monitoring the PV plant via RS485-communication bus, incl. module-temperature sensor and top-hat rail power supply
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<b>Region:</b>	0 USA , Canada 1 EU
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**Power-Injector** RS485 Power Injector supply unit for power supply via the RS485 communication bus, incl. plug-in power supply and mounting materials

Valid from: as provided in contract

<b>BT-485-CON-DEV</b> <b>(price before options):</b>	x	SMA Power Injector with BLUETOOTH® Feed-in and communication unit for power supply via the RS485 communication bus and connection to the Sunny SensorBox to the SMA Bluetooth communication, incl. plug-in power supply and mounting material
		0 without plug-in power supply 1 with plug-in power supply 2 incl. Power Modul for power supply from the SB 3/4/5000TL-20, SB 3/4/5000TL-21, STP 8/10/12/15/17000TL-10, WB 3600TL-20 and 5000TL-20 (instead of plug-in power supply) and mounting material



**Sunny Matrix**

Valid from: as provided in contract

<b>SMATRIX</b>	x	x	x	x	x	x	xx	Sunny Matrix Large display for data visualization, with customer-specific front panel, incl. Ethernet interface
<b>Cabinet:</b>	0							Enclosure size: 800 mm x 400 mm
	1							Enclosure size: 800 mm x 800 mm
	2							Enclosure size: 800 mm x 1000 mm
<b>Line 1:</b>		1						line 4 characters
		2						line 8 characters
		3						line 12 characters
		4						line 16 characters
<b>Line 2:</b>			0					without line 2
			1					line 4 characters
			2					line 8 characters
			3					line 12 characters
			4					line 16 characters
<b>Line 3*:</b>				0				without line 3
				1				line 4 characters
				2				line 8 characters
				3				line 12 characters
				4				line 16 characters
<b>Line 4*:</b>					0			without line 4
					1			line 4 characters
					2			line 8 characters
					3			line 12 characters
					4			line 16 characters
<b>Power plug:</b>						0		Power plug: SCHUKO (standard)
						1		Power plug: UK
<b>Language:</b>							DE	Germany (Software and documentation language: German)
							ES	Spain (Software and documentation language: Spanish)
							FR	France (Software and documentation language: French)
							GB	Great Britain (Software and documentation language: English)
							IT	Italy (Software and documentation language: Italian)
							NL	Netherlands (Software and documentation language: Dutch)
							PT	Portugal (Software and documentation language: Portuguese)

\*only available with enclosure size 800 mm x 800 mm and larger



When ordering a Sunny Matrix with a customer-specific front panel, a suitable image must be provided. The specifications regarding the requirements of the image that is to be used on the front panel of the Sunny Matrix may be downloaded on the SMA website ([www.SMA.de](http://www.SMA.de)) on the Sunny Matrix product page.

**SMATRIX-STD-40**

Sunny Matrix Standard \*5) external Display for data visualization,  
incl. Ethernet interface Enclosure size: 800 mm x 400 mm 1 line 16 digits  
Power plug: SCHUKO Software and documentation  
language: English

**SMATRIX-STD-80**

Sunny Matrix Standard \*5) external Display for data visualization, incl. Ethernet interface Enclosure size: 800 mm x 800 mm 2 lines,  
16 digits each Power plug: SCHUKO Software and documentation language: English

**SMATRIX-STD-100**

Sunny Matrix Standard \*5) external Display for data visualization, incl. Ethernet interface Enclosure size: 800 mm x 1000 mm 2 lines,  
16 digits each Power plug: SCHUKO Software and documentation language: English

\*5) Changing the defined configuration or the front panel design is not possible.



## Software

<b>SMAOPCSERVER</b>	SMA OPC Server, the standardized data interface for large plants PC Software for Windows XP Professional (SP2), Windows Server 2003 (recommended)
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## Communication Accessories

**I-7520** Interface converter RS485/RS232 incl. RS232 cable 1.8 m  
(RS485: terminal block/RS232: D-Sub 9-pin socket)

**I-7561** Interface converter RS485/USB, RS422/USB, RS232/USB  
(RS485/422/232: terminal block)

**WS485-01-10\*** Wireless-Set 485-01 radio set  
for longer distances with RS485 communication  
for operation with Sunny WebBox,  
incl. antenna for outside mounting

**WS485-02-10\*** Wireless-Set 485-02 radio set  
Extension kit for Wireless-Set 485-01  
for second radio link

**WS485-01-11\*** Wireless-Set 485-01 radio set  
for AUSTRALIA

**WS485-02-11\*** Extension kit for Wireless-Set 485-01  
for AUSTRALIA

\* except combination of the Sunny Boy Control and inverters type  
SB 3000TL-20, SB 4000TL-20, SB 5000TL-20, STP 8000TL-10, STP 10000TL-10, STP 12000TL-10, STP 15000TL-10, STP 17000TL-10



<b>COMCAB-IN100</b>	Communication cable for RS232 or RS485 system communication for inside application 2 x 2 x 0,22 mm <sup>2</sup> , 100 m ring
<b>COMCAB-IN200</b>	Communication cable for RS232 or RS485 system communication for inside application 2 x 2 x 0,22 mm <sup>2</sup> , 200 m ring
<b>COMCAB-IN500</b>	Communication cable for RS232 or RS485 system communication for inside application 2 x 2 x 0,22 mm <sup>2</sup> , 500 m ring
<b>COMCAB-IN1000</b>	Communication cable for RS232 or RS485 system communication for inside application 2 x 2 x 0,22 mm <sup>2</sup> , 1.000 m ring
<b>COMCAB-OUT100</b>	Communication cable for RS232 or RS485 system communication for outside application 2 x 2 x 0,22 mm <sup>2</sup> , 100 m ring
<b>COMCAB-OUT200</b>	Communication cable for RS232 or RS485 system communication for outside application 2 x 2 x 0,22 mm <sup>2</sup> , 200 m ring
<b>COMCAB-OUT500</b>	Communication cable for RS232 or RS485 system communication for outside application 2 x 2 x 0,22 mm <sup>2</sup> , 500 m ring
<b>COMCAB-OUT1000</b>	Communication cable for RS232 or RS485 system communication for outside application 2 x 2 x 0,22 mm <sup>2</sup> , 1.000 m ring
<b>SB-PG-OUT</b>	PG cable gland for the connection of the outdoor communication cable COMCAB-OUTx to inverters type SWR/SB/SMC, 10 pc.

# Off-grid Inverter





**Sunny Island 2224 (SI 2224)**

Valid from: as provided in contract

<b>SI 2224 (price before options):</b>	x	x	x	0	x	Bidirectional off-grid inverter, output voltage: 230 V AC/50 Hz and 220 V AC/60 Hz, 30 min power 2.9 kW, rated power 2.2 kW, battery voltage: 2.2 V DC, external battery-temperature sensor, 3 m indoors synchronization cable
<b>Communication:</b>	0 4					No communication RS485
<b>User interface:</b>	0					Master device: with control panel Sunny Remote Control (SRC-20), SD card, 5 m synchronization cable for Indoor installation
	1					Slave device: without control panel
<b>Color of lid:</b>			3			yellow (standard), other colors upon request
<b>Documentation:</b>					01	German, English, Spanish
					02	French, Italian, Greek



**Sunny Island 5048 (SI 5048)**

Valid from: as provided in contract

<p><b>SI 5048 (price before options):</b></p>	<p>x</p>	<p>0</p>	<p>x</p>	<p>Bidirectional off-grid inverter, output voltage: 230 V AC/50 Hz and 220 V AC/60 Hz, 30 min power 6.5 kW, rated power 5.0 kW, battery voltage: 48 V DC, external battery-temperature sensor, SD/MMC card, synchronization cable</p>
<p><b>Communication:</b></p>	<p>0</p>	<p>4</p>	<p>6</p>	<p>No communication for systems without communication and slave devices</p> <p>RS485: RS485 communication interface, one communication interface per master device, 1x data cable (white) from RJ45 to 3 open insulated conductors between Sunny Island and Sunny WebBox or Sunny Boy, 1x terminator</p> <p>Multicluster system: RS485 and CAN bus at one communication interface, incl. 1 x 5 m data cable (yellow) for CAN bus, 1 x 5 m data cable (grey) for RS485, 1 x data cable (white) from RJ45 to 3 open insulated conductors between Sunny Island and Sunny WebBox or Sunny Boy, 1 x grounding cable, 2 x terminator</p>
<p><b>Color of lid:</b></p>		<p>3</p>		<p>yellow (standard), other colors upon request</p>
<p><b>Documentation:</b></p>		<p>01</p>	<p>02</p>	<p>German, English, Spanish</p> <p>French, Italian, Greek</p>





**Sunny Island 6.0H (SI6.0H-11)**

Valid from: as provided in contract

<p><b>SI6.0H-11 (price before options):</b></p>	<p>x</p>	<p>x</p>	<p>x</p>	<p>0</p>	<p>x</p>	<p>Bidirectional off-grid inverter, output voltage: 230 V AC/50 Hz and 220 V AC/60 Hz, 30 min power 6.0 kW, rated power 4.6 kW, battery voltage: 48 V DC, external battery-temperature sensor, 2 m indoors synchronization cable</p>
<p><b>Communication:</b></p>	<p>0</p>					<p>No communication for systems without communication and slave devices</p>
	<p>4</p>					<p>RS485: RS485 communication interface (is mounted at delivery), 1 x communication interface per master device, 1 x 5 m data cable (grey), 1 x data cable (white) from RJ45 to 3 open insulated conductors between Sunny Island and Sunny WebBox or Sunny Boy</p>
	<p>6</p>					<p>Multicluster system: RS485 and CAN communication interface (mounted at delivery), per master device one RS485 and CAN communication interface each, incl. 1 x 5 m data cable (yellow) for CAN bus, 1 x 5 m data cable (grey) for RS485, 1 x data cable (white) from RJ45 to 3 open insulated conductors between Sunny Island and Sunny WebBox or Sunny Boy</p>
<p><b>User interface:</b></p>	<p>0</p>					<p>Master device: with control panel Sunny Remote Control (SRC-20), SD card, 5 m synchronization cable for Indoor installation Slave device: without control panel</p>
<p><b>Color of lid:</b></p>		<p>3</p>				<p>yellow (standard), other colors upon request</p>
<p><b>Documentation:</b></p>						<p>DE German EN English ES Spanish FR French IT Italian GR Greek</p>



**Sunny Island 8.0H (SI8.0H-11)**

Valid from: as provided in contract

<p><b>SI8.0H-11 (price before options):</b></p>	<p>x</p>	<p>x</p>	<p>x</p>	<p>0</p>	<p>x</p>	<p>Bidirectional off-grid inverter, output voltage: 230 V AC/50 Hz and 220 V AC/60 Hz, 30 min power 8.0 kW, rated power 6.0 kW, battery voltage: 48 V DC, external battery-temperature sensor, 2 m indoors synchronization cable</p>
<p><b>Communication:</b></p>	<p>0</p>					<p>No communication for systems without communication and slave devices</p>
	<p>4</p>					<p>RS485: RS485 communication interface (is mounted at delivery), 1 x communication interface per master device, 1 x 5 m data cable (grey), 1 x data cable (white) from RJ45 to 3 open insulated conductors between Sunny Island and Sunny WebBox or Sunny Boy</p>
	<p>6</p>					<p>Multicluster system: RS485 and CAN communication interface (mounted at delivery), per master device one RS485 and CAN communication interface each, incl. 1 x 5 m data cable (yellow) for CAN bus, 1 x 5 m data cable (grey) for RS485, 1 x data cable (white) from RJ45 to 3 open insulated conductors between Sunny Island and Sunny WebBox or Sunny Boy</p>
<p><b>User interface:</b></p>	<p>0</p>					<p>Master device: with control panel Sunny Remote Control (SRC-20), SD card, 5 m synchronization cable for Indoor installation Slave device: without control panel</p>
<p><b>Color of lid:</b></p>		<p>3</p>				<p>yellow (standard), other colors upon request</p>
<p><b>Documentation:</b></p>					<p>DE German EN English ES Spanish FR French IT Italian GR Greek</p>	



## Sunny Island Demo

<b>SI-Dummy2224</b>	Sunny Island 2224 demo device, without function
<b>SI-Dummy5048</b>	Sunny Island 5048 demo device, without function
<b>SIX.XHM-DUMMY</b>	Sunny Island SI8.0H/6.0H demo device, without function
<b>Ständersystem</b>	Stand system for Sunny Island demo device

## Sunny Island Charger

Valid from: as provided in contract

<b>SIC50-MPT (price before options):</b>	x	x	0	MPP solar charge controller battery voltage: 48 V/24 V/12 V battery current: 50 A/ 50 A/ 50 A nominal power: 2400 W at 48 V, max. PV voltage: 140 V incl. SIC-PB for communication with Sunny Island
<b>Communication:</b>			0	Sunny Island Charger Piggy Back for the communication between Sunny Island Charger and the Sunny Island 8.0H/6.0H/5048/2224 via sync bus of the Sunny Islands, including 5 m synchronization cable for indoor installation
			1	No communication
<b>Temperature sensor:</b>			0	Without temperature sensor
			1	With external temperature sensor



**Multicluste r-Boxes**

**Multicluste r Box MC-BOX-6.3**

Valid from: as provided in contract

<p><b>MC-BOX-6.3 (price before options):</b></p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>x</p>	<p>3-phase Multicluste r-Box f or 230 V / 50 Hz and 220 V / 60 Hz, connections for: 6 x Sunny Island 5048/6.0H/8.0H, 1 x generator connection with 55 kW, 1 x PV connection with 55 kW, 1 x, consumer load 55 kW incl. load-shedding contactor, incl. 1 x 5 m synchronization cable, from SI 5048/6.0H/8.0H to MC-Box, incl. 3 x 5 m communication cable from SI 5048/6.0H/8.0H to MC-Box</p>
<p><b>Dokumentation:</b></p>						<p>DE German EN English ES Spanish FR French IT Italian GR Greek</p>



**Multicluste r Box MC-BOX-12.3**

Valid from: as provided in contract

<p><b>MC-BOX-12.3</b> <b>(price before options):</b></p>	0	0	0	0	x	<p>3-phase Multicluste r-Box for 230 V / 50 Hz and 220 V / 60 Hz, connections for: 12 x Sunny Island 5048/6.0H/8.0H, 1 x generator connection with 110 kW, 1 x PV connection with 110 kW, 1 x, consumer load 110 kW incl. load-shedding contactor, incl. 1 x 5 m synchronization cable, from Sunny Island to MC-Box, incl. 3 x 5 m communication cable from Sunny Island to MC-Box</p>
<p><b>Dokumentation:</b></p>						<p><b>DE</b> German <b>EN</b> English <b>ES</b> Spanish <b>FR</b> French <b>IT</b> Italian <b>GR</b> Greek</p>



**Multicluseter Box MC-BOX-36.3**

Valid from: as provided in contract

<p><b>MC-BOX-36.3</b> <b>(price before options):</b></p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>	<p>x</p>	<p>Three-phase Multicluseter Box for 230 V/50 Hz and 220 V/60 Hz, connections for: 36 x Sunny Island 5048/6.0 H, or connections for: 30 x Sunny Island 8.0, 1 x PV array connection with 300 kW, 1 x PV connection with 300 kW, 1 x load connection 300 kW, incl. load shedding contactor, incl. 1 x 5 m synchronization cable from Sunny Island to the MC-Box, incl. 3 x 5 m data cable from Sunny Island to the MC-Box incl. 1 set (3 pcs. each 500 A) replacement fuse elements for NH3 fuse switch-disconnector</p>
<p><b>Dokumentation:</b></p>						<p>DE German EN English ES Spanish FR French IT Italian GR Greek</p>



## Sunny Island Accessories



<b>SI-CONFIG-10-V</b>	SMA Off-Grid Configurator: Program for the design and simulation of off-grid PV plants with SMA components
<b>SRC-20</b>	Control panel Sunny Remote Control for SI 2224, SI 6.0H, SI 8.0H, incl. 128 MB SD card, and 5 m communication cable for indoor installation, mounting material
<b>232PB-G3</b>	RS232 interface as upgrade kit for Sunny Island SI 5048
<b>SI-485PB-NR</b>	RS485 communication interface as a retrofit kit for Sunny Island SI 2224, SI 5048, incl.: 1 x adapter cable white (from RJ45 to 3 open insulated conductors with wire-end ferrules for clamping), 1 x terminator, mounting instructions
<b>SI-COMSMA-NR</b>	RS485 communication interface as retrofit kit for SI 8.0H/6.0H, 1 x 5 m data cable (grey), 1 x adapter cable (white) from RJ45 to 3 open insulated conductors, 1 x terminator (plugged), 1 x screw, mounting instructions
<b>SI-SYSCAN-NR</b>	CAN communication interface as retrofit kit for SI 8.0H/6.0H master device in multicuster systems, 1 x 5 m data cable (yellow), 1 x terminator (plugged), 1 x screw, mounting instructions
<b>MC-PB</b>	Multicuster communication interface as a retrofit kit for SI 5048 master device (CAN and RS485 communication interface on a Piggy-Back), incl.: 1 x 5 m data cable CAN-Bus (yellow), 1 x 5 m data cable RS485 (grey), 1 x adapter cable (white) from RJ45 to three open insulated conductors, 1 x grounding cable, 2 x termination resistor, mounting instructions
<b>SIC-PB</b>	SIC Piggy Back for the communication between SIC and the SI 8.0H, SI 6.0H, SI 5048, SI2224 via the sync bus of the Sunny Islands, 5 m synchronization cable for indoor installation
<b>SI-COM-RJ45-3</b>	Adapter cables (from RJ45 to 3 open insulated conductors with bootlace ferrules with fasteners) for using RS485 communication between Sunny Island and Sunny WebBox
<b>SI-COMCAB-OUT2</b>	2 m communication cable with RJ45 plugs on both sides for outdoor installation, suitable for SRC-20, sync bus, CAN bus, RS485 connection
<b>SI-COMCAB-OUT5</b>	5 m communication cable with RJ45 plugs on both sides for outdoor installation, suitable for SRC-20, sync bus, CAN bus, RS485 connection
<b>SI-COMCAB-OUT10</b>	10 m communication cable with RJ45 plugs on both sides for outdoor installation, suitable for SRC-20, sync bus, CAN bus, RS485 connection
<b>SI-COMCAB-OUT20</b>	20 m communication cable with RJ45 plugs on both sides for outdoor installation, suitable for SRC-20, sync bus, CAN bus, RS485 connection





## Generator Management Box

- SI-GENMAN-TFH230** Generator Management Box for 230 V generators, power supply 12 VDC from generator, incl. transformer (230 V / 12 V) for DIN rail mounting
- SI-GENMAN-TFS230** Generator Management Box for 230 V generators, power supply 12 VDC from generator, incl. transformer (230 V / 12 V) as plug-in power supply



## Battery fuse boxes

### BATFUSE-A.01

Valid from: as provided in contract

<b>BATFUSE-A.01 (price before options):</b>	x xx	2-pole NH00 battery fuse for 1 Sunny Island or Sunny Backup, 2 DC inputs (2 x battery or 1 x battery and 1 x Sunny Island Charger)
<b>Fuse value:</b>	0	2 x 125 A fuse plug for Sunny Island 2224, Sunny Backup 2200 with 2 spare fuses
<b>Dokumentation:</b>	01 02	01 German, English, Spanish 02 French, Italian, Greek

### BATFUSE-A.03

Valid from: as provided in contract

<b>BATFUSE-A.03 (price before options):</b>	x xx	2-pole NH00 battery fuses for up to 3 Sunny Island or Sunny Backup, 4 DC inputs (2 x battery and 2 x Sunny Island Charger)
<b>Fuse value:</b>	0	6 x 125 A fuse plug for Sunny Island 6 with 2224 spare fuses
<b>Dokumentation:</b>	01 02	01 German, English, Spanish 02 French, Italian, Greek

**BATFUSE-B.01**

Valid from: as provided in contract

<b>BATFUSE-B.01 (price before options):</b>	x xx	2-pole NH1 battery fuse switch disconnecter for one Sunny Island or Sunny Backup, 3 DC input ports (1 x battery and 2 x Sunny Island Chargers), 1 X auxiliary voltage output with 8 A
<b>Fuse value:</b>	0	2 x 125 A fuse plug for Sunny Island 2224/Sunny Backup 2200 with 2 spare fuses
	1	2 x 160 A fuse plug for Sunny Island 6.0H with 2 spare fuses
	2	2 x 200 A fuse plug for Sunny Island 8.0H with 2 spare fuses
	3	2 x 250 A fuse plug for Sunny Island 5048/Sunny Backup 5000 with 2 spare fuses
<b>Dokumentation:</b>	01	German, English, Spanish
	02	French, Italian, Greek

**BATFUSE-B.03**

Valid from: as provided in contract

<b>BATFUSE-B.03 (price before options):</b>	x xx	2-pole NH1 battery fuse switch disconnecter for up to 3 Sunny Island or Sunny Backup, 6 DC input ports (2 x battery and 4 x Sunny Island Charger), 1 X auxiliary voltage output with 8 A
<b>Fuse value:</b>	0	6 x 125 A fuse plug for Sunny Island 2224/Sunny Backup 2200 with 6 spare fuses
	1	6 x 160 A fuse plug for Sunny Island 6.0H with 6 spare fuses
	2	6 x 200 A fuse plug for Sunny Island 8.0H with 6 spare fuses
	3	6 x 250 A fuse plug for Sunny Island 5048/Sunny Backup 5000 with 6 spare fuses
<b>Dokumentation:</b>	01	German, English, Spanish
	02	French, Italian, Greek



## Battery cable sets

<b>DC-CABLE.35-2</b>	2 x 2 m ready to use, double-insulated battery cable type NSGAFöu for connection of the battery or the BatFuse with SI 2224. Cross-section 35 mm <sup>2</sup> , with narrow cable shoes pre assembled (M8)
<b>DC-CABLE.35-4</b>	2 x 4 m ready to use, double-insulated battery cable type NSGAFöu for connection of the battery or the BatFuse with SI 2224. Cross-section 35 mm <sup>2</sup> , with narrow cable shoes pre assembled (M8)
<b>DC-CABLE.35-6</b>	2 x 6 m ready to use, double-insulated battery cable type NSGAFöu for connection of the battery or the BatFuse with SI 2224. Cross-section 35 mm <sup>2</sup> , with narrow cable shoes pre assembled (M8)
<b>DC-CABLE.70-3</b>	2 x 3 m ready to use, double-insulated battery cable type NSGAFöu for connection of the battery or the BatFuse with SI 5048/6.0H/8.0H. Cross-section 70 mm <sup>2</sup> , with narrow cable shoes (M8) pre assembled
<b>DC-CABLE.70-6</b>	2 x 6 m ready to use, double-insulated battery cable type NSGAFöu for connection of the battery or the BatFuse with SI 5048/6.0H/8.0H. Cross-section 70 mm <sup>2</sup> , with narrow cable shoes (M8) pre assembled
<b>DC-CABLE.70-9</b>	2 x 9 m ready to use, double-insulated battery cable type NSGAFöu for connection of the battery or the BatFuse with SI 5048/6.0H/8.0H. Cross-section 70 mm <sup>2</sup> , with narrow cable shoes (M8) pre assembled
<b>DC-CABLE.95-3</b>	2 x 3 m ready to use, double-insulated battery cable type Radox 4GKW for connection of the BatFuse with SI 2012. Cross-section 95 mm <sup>2</sup> , with narrow cable shoes pre assembled
<b>DC-CABLE.95-6</b>	2 x 6 m ready to use, double-insulated battery cable type Radox 4GKW for connection of the BatFuse with SI 2012. Cross-section 95 mm <sup>2</sup> , with narrow cable shoes pre assembled
<b>DC-CABLE.95-9</b>	2 x 9 m ready to use, double-insulated battery cable type Radox 4GKW for connection of the BatFuse with SI 2012. Cross-section 95 mm <sup>2</sup> , with narrow cable shoes pre assembled



<b>SI-LS45-48</b>	3-pole load-shedding contactor with 45 A nominal current (AC-1) with 48 V DC coil for Sunny Island 5048/6.0H/8.0H
<b>SI-LS100-48</b>	3-pole load-shedding contactor with 100 A nominal current (AC-1) with 48 V DC coil for Sunny Island 5048/6.0H/8.0H
<b>SI-LS25-24</b>	3-pole load-shedding contactor with 25 A nominal current (AC-1) with 24 V DC coil for Sunny Island 2224
<b>SI-LS45-24</b>	3-pole load-shedding contactor with 45 A nominal current (AC-1) with 24 V DC coil for Sunny Island 2224

### Measuring shunts for the battery current detection

<b>SI-SHUNT200</b>	Battery current measuring shunt for two Sunny Island 6.0H/8.0H/5048/2224 (200 A nominal current / 60 mV)
<b>SI-SHUNT400</b>	Battery current measuring shunt for two Sunny Island 6.0H/8.0H/5048/2224 (400 A nominal current / 60 mV)
<b>SI-SHUNT600</b>	Battery current measuring shunt for two Sunny Island 6.0H/8.0H/5048/2224 (600 A nominal current / 60 mV)
<b>SI-SHUNT800</b>	Battery current measuring shunt for two Sunny Island 6.0H/8.0H/5048/2224 (800 A nominal current / 60 mV)

### Sunny Island spare parts

<b>BAT-TEMP-SENSOR</b>	Reserve battery temperature sensor type KTY with 10 m connection cable for Sunny Island, Sunny Backup or Sunny Island Charger
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# Wind Energy Inverters





### Windy Tripower 9000TL (WTP 9000TL-20)

Valid from: as provided in contract

<b>WTP 9000TL-20 (Basispreis):</b>	xx	x	-	xx	xx	Wind inverter for grid feed-in Pac,r/Sac, max 9000 W/9000 VA three-phase feed-in, with reactive power supply, transformerless, graphic display, rotating selection switch for country settings SMA Bluetooth® and Webconnect communication interface, multifunctions relay,  DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
specific price 1)						
<b>Color of lid:</b>	08					Gentian blue (additional colors on request)
<b>I/O port moduls:</b>	0	2				Without (standard) Power Control Module
<b>Documentation:</b>					DE EN ES FR IT PT DK 00	German English Spanish French Italian Portuguese Danish Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>					DE OF ZZ	Default Setting VDE-AR-N 4105 (standard) Default setting for offgrid operation Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.



### Windy Tripower 8000TL (WTP 8000TL-20)

Valid from: as provided in contract

<b>WTP 8000TL-20 (Basispreis):</b>	xx	x	-	xx	xx	Wind inverter for grid feed-in Pac,r/Sac, max 8000 W/8000 VA three-phase feed-in, with reactive power supply, transformerless, graphic display, rotating selection switch for country settings SMA Bluetooth® and Webconnect communication interface, multifunctions relay,  DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>						
<b>Color of lid:</b>	08					Gentian blue (additional colors on request)
<b>I/O port moduls:</b>	0	2				Without (standard) Power Control Module
<b>Documentation:</b>				DE		German
				EN		English
				ES		Spanish
				FR		French
				IT		Italian
				PT		Portuguese
				DK		Danish
				00		Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>				DE		Default Setting VDE-AR-N 4105 (standard)
				OF		Default setting for offgrid operation
				ZZ		Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.





### Windy Tripower 7000TL (WTP 7000TL-20)

Valid from: as provided in contract

<b>WTP 7000TL-20 (Basispreis):</b>	xx	x	-	xx	xx	Wind inverter for grid feed-in Pac,r/Sac, max 7000 W/7000 VA three-phase feed-in, with reactive power supply, transformerless, graphic display, rotating selection switch for country settings SMA Bluetooth® and Webconnect communication interface, multifunctions relay,  DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>						
<b>Color of lid:</b>	08					Gentian blue (additional colors on request)
<b>I/O port moduls:</b>	0	2				Without (standard) Power Control Module
<b>Documentation:</b>					DE German EN English ES Spanish FR French IT Italian PT Portuguese DK Danish 00 Language package (DE, EN, ES, FR, IT, PT)	
<b>Country specific grid settings:</b>					DE Default Setting VDE-AR-N 4105 (standard) OF Default setting for offgrid operation ZZ Grid parameter country settings: customer specification (setting code, if available).	

#### Comments

1) Can vary depending on options.



### Windy Tripower 6000TL (WTP 6000TL-20)

Valid from: as provided in contract

<b>WTP 6000TL-20 (Basispreis):</b>	xx	x	-	xx	xx	Wind inverter for grid feed-in Pac,r/Sac, max 6000 W/6000 VA three-phase feed-in, with reactive power supply, transformerless, graphic display, rotating selection switch for country settings SMA Bluetooth® and Webconnect communication interface, multifunctions relay,  DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>						
<b>Color of lid:</b>	08					Gentian blue (additional colors on request)
<b>I/O port moduls:</b>	0	2				Without (standard) Power Control Module
<b>Documentation:</b>				DE		German
				EN		English
				ES		Spanish
				FR		French
				IT		Italian
				PT		Portuguese
				DK		Danish
				00		Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>				DE		Default Setting VDE-AR-N 4105 (standard)
				OF		Default setting for offgrid operation
				ZZ		Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.



### Windy Tripower 5000TL (WTP 5000TL-20)

Valid from: as provided in contract

<b>WTP 5000TL-20 (Basispreis):</b>	xx	x	-	xx	xx	Wind inverter for grid feed-in Pac,r/Sac, max 5000 W/5000 VA three-phase feed-in, with reactive power supply, transformerless, graphic display, rotating selection switch for country settings SMA Bluetooth® and Webconnect communication interface, multifunctions relay,  DC SUNCLIX terminal incl. Electronic Solar Switch (ESS)
<b>specific price 1)</b>						
<b>Color of lid:</b>	08					Gentian blue (additional colors on request)
<b>I/O port moduls:</b>	0	2				Without (standard) Power Control Module
<b>Documentation:</b>					DE German EN English ES Spanish FR French IT Italian PT Portuguese DK Danish 00 Language package (DE, EN, ES, FR, IT, PT)	
<b>Country specific grid settings:</b>					DE Default Setting VDE-AR-N 4105 (standard) OF Default setting for offgrid operation ZZ Grid parameter country settings: customer specification (setting code, if available).	

#### Comments

1) Can vary depending on options.



**Windy Boy 6000A (WB 6000A-11)**

Valid from: as provided in contract

<b>WB 6000A-11 (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Inverter for small wind turbine systems, 6000 Wnom/6000 WMax grid-tied operation, grid frequency 50 Hz/60 Hz (auto-detection)
specific price 1)										
<b>Communication:</b>	5									without communication interface
	8									RS485
	B									SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Connector:</b>				4						SUNCLIX
<b>Documentation:</b>								DE		German
								EN		English
								ES		Spanish
								FR		French
								IT		Italian
								PT		Portuguese
<b>Country specific grid settings:</b>								DE		Default Setting VDE-AR-N 4105 (standard)
								OF		Default setting for offgrid operation
								ZZ		Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Windy Boy 5000A (WB 5000A-11)**

Valid from: as provided in contract

<b>WB 5000A-11 (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Inverter for small wind turbine systems, 5000 Wnom/5500 WMax grid-tied operation, grid frequency 50 Hz/60 Hz (auto-detection)
specific price 1)										
<b>Communication:</b>	5									without communication interface
	8									RS485
	B									SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Connector:</b>				4						SUNCLIX
<b>Documentation:</b>									DE	German
									EN	English
									ES	Spanish
									FR	French
									IT	Italian
									PT	Portuguese
<b>Country specific grid settings:</b>									DE	Default Setting VDE-AR-N 4105 (standard)
									OF	Default setting for offgrid operation
									ZZ	Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



### Windy Boy 5000TL (WB 5000TL-21)

Valid from: as provided in contract

<b>WB 5000TL-21 (Basispreis):</b>	x	xx	4	x	-	xx	xx	Inverter for small wind turbine systems for grid feed-in Pac,r/Sac, max 4600 W/ 5000 VA* transformerless, for reactive power feed-in, graphic display, rotary switch for country settings SMA Bluetooth® communication interface, DC connection SUNCLIX, incl. Electronic Solar Switch (ESS)
specific price 1)								
<b>Communication:</b>	0							SMA Bluetooth® (integrated)
	1							SMA Bluetooth® (integrated) + RS485
<b>Color of lid:</b>		00						red (additional colors on request)
<b>I/O port moduls:</b>			0					Without (standard)
			1					Multi-function relay
<b>Documentation:</b>							DE	German (Standard)
							EN	English
							ES	Spanish
							FR	French
							IT	Italian
							PT	Portuguese
							00	Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>							00	Default Setting VDE-AR-N 4105 (standard)
							0F	Default setting for offgrid operation
							ZZ	Grid parameter country settings: customer specification (setting code, if available).

#### Comments

1) Can vary depending on options.

\* with configuration according to VDE-AR-N 4105, limitation of Sac to max. 4600 W.


**Windy Boy 4000TL (WB 4000TL-21)**

Valid from: as provided in contract

<b>WB 4000TL-21 (Basispreis):</b>	x	xx	4	x	-	xx	xx	Inverter for small wind turbine systems for grid feed-in Pac,r/Sac, max 4000 W/ 4000 VA* transformerless, for reactive power feed-in, graphic display, rotary switch for country settings SMA Bluetooth® communication interface, DC connection SUNCLIX, incl. Electronic Solar Switch (ESS)
specific price 1)								
<b>Communication:</b>	0							SMA Bluetooth® (integrated)
	1							SMA Bluetooth® (integrated) + RS485
<b>Color of lid:</b>		00						red (additional colors on request)
<b>I/O port moduls:</b>			0					Without (standard)
			1					Multi-function relay
<b>Documentation:</b>							DE	German (Standard)
							EN	English
							ES	Spanish
							FR	French
							IT	Italian
							PT	Portuguese
							00	Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>							00	Default Setting VDE-AR-N 4105 (standard)
							0F	Default setting for offgrid operation
							ZZ	Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.


**Windy Boy 3600TL (WB 3600TL-21)**

Valid from: as provided in contract

<b>WB 3600TL-21 (Basispreis):</b>	x	xx	4	x	-	xx	xx	Inverter for small wind turbine systems for grid feed-in Pac,r/Sac, max 3680 W/ 3680 VA* transformerless, for reactive power feed-in, graphic display, rotary switch for country settings SMA Bluetooth® communication interface, DC connection SUNCLIX, incl. Electronic Solar Switch (ESS)
specific price 1)								
<b>Communication:</b>	0							SMA Bluetooth® (integrated)
	1							SMA Bluetooth® (integrated) + RS485
<b>Color of lid:</b>		00						red (additional colors on request)
<b>I/O port moduls:</b>			0					Without (standard)
			1					Multi-function relay
<b>Documentation:</b>							DE	German (Standard)
							EN	English
							ES	Spanish
							FR	French
							IT	Italian
							PT	Portuguese
							00	Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>							00	Default Setting VDE-AR-N 4105 (standard)
							0F	Default setting for offgrid operation
							ZZ	Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.





**Windy Boy 3000TL (WB 3000TL-21)**

Valid from: as provided in contract

<b>WB 3000TL-21 (Basispreis):</b>	x	xx	4	x	-	xx	xx	Inverter for small wind turbine systems for grid feed-in Pac,r/Sac, max 3000 W/ 3000 VA* transformerless, for reactive power feed-in, graphic display, rotary switch for country settings SMA Bluetooth® communication interface, DC connection SUNCLIX, incl. Electronic Solar Switch (ESS)
specific price 1)								
<b>Communication:</b>	0							SMA Bluetooth® (integrated)
	1							SMA Bluetooth® (integrated) + RS485
<b>Color of lid:</b>		00						red (additional colors on request)
<b>I/O port moduls:</b>			0					Without (standard)
			1					Multi-function relay
<b>Documentation:</b>							DE	German (Standard)
							EN	English
							ES	Spanish
							FR	French
							IT	Italian
							PT	Portuguese
							00	Language package (DE, EN, ES, FR, IT, PT)
<b>Country specific grid settings:</b>							00	Default Setting VDE-AR-N 4105 (standard)
							0F	Default setting for offgrid operation
							ZZ	Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Windy Boy 3800 (WB 3800-11)**

Valid from: as provided in contract

<b>WB 3800-11 (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Inverter for small wind turbine systems, 3800 Wnom/3800 WMax grid-tied operation, grid frequency 50 Hz/60 Hz (auto-detection)
specific price 1)										
<b>Communication:</b>	5									without communication interface
	8									RS485
	B									SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Connector:</b>				4						SUNCLIX
<b>Documentation:</b>								DE		German
								EN		English
								ES		Spanish
								FR		French
								IT		Italian
								PT		Portuguese
<b>Country specific grid settings:</b>								DE		Default Setting VDE-AR-N 4105 (standard)
								OF		Default setting for offgrid operation
								ZZ		Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Windy Boy 3300 (WB 3300-11)**

Valid from: as provided in contract

<b>WB 3300-11 (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Inverter for small wind turbine systems, 3300 Wnom/3600 WMax grid-tied operation, grid frequency 50 Hz/60 Hz (auto-detection)
<b>specific price 1)</b>										
<b>Communication:</b>	5									without communication interface
	8									RS485
	B									SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Connector:</b>				4						SUNCLIX
<b>Documentation:</b>									DE	German
									EN	English
									ES	Spanish
									FR	French
									IT	Italian
									PT	Portuguese
<b>Country specific grid settings:</b>									DE	Default Setting VDE-AR-N 4105 (standard)
									OF	Default setting for offgrid operation
									ZZ	Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Windy Boy 3000 (WB 3000)**

Valid from: as provided in contract

<b>WB 3000 (price before options):</b>	x	0	x	4	1	-	xx	xx	Inverter for small wind turbine systems, 2750 Wnom/3000 WMax grid-tied operation, grid frequency 50 Hz/60 Hz (auto-detection)
<b>specific price 1)</b>									
<b>Communication:</b>	5								without communication interface
	8								RS485
	B								SMA Bluetooth®
<b>Color of lid:</b>		0							red (additional colors on request)
<b>Connector:</b>			4						SUNCLIX
<b>Documentation:</b>							DE		German
							EN		English
							ES		Spanish
							FR		French
							IT		Italian
							PT		Portuguese
<b>Country specific grid settings:</b>							DE		Default Setting VDE-AR-N 4105 (standard)
							OF		Default setting for offgrid operation
							ZZ		Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Windy Boy 2500 (WB 2500)**

Valid from: as provided in contract

<b>WB 2500 (price before options):</b>	x	0	x	4	1	-	xx	xx	Inverter for small wind turbine systems, 2300 Wnom/2500 WMax grid-tied operation, grid frequency 50 Hz/60 Hz (auto-detection)
specific price 1)									
<b>Communication:</b>	5								without communication interface
	8								RS485
	B								SMA Bluetooth®
<b>Color of lid:</b>		0							red (additional colors on request)
<b>Connector:</b>			4						SUNCLIX
<b>Documentation:</b>							DE		German
							EN		English
							ES		Spanish
							FR		French
							IT		Italian
							PT		Portuguese
<b>Country specific grid settings:</b>							DE		Default Setting VDE-AR-N 4105 (standard)
							OF		Default setting for offgrid operation
							ZZ		Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Windy Boy 1700 (WB 1700)**

Valid from: as provided in contract

<b>WB 1700 (price before options):</b>	x	0	0	x	4	1	-	xx	xx	Inverter for small wind turbine systems, 1550 Wnom/1700 WMax grid-tied operation, grid frequency 50 Hz/60 Hz (auto-detection)
specific price 1)										
<b>Communication:</b>	5									without communication interface
	8									RS485
	B									SMA Bluetooth®
<b>Color of lid:</b>			0							red (additional colors on request)
<b>Connector:</b>				4						SUNCLIX
<b>Documentation:</b>									DE	German
									EN	English
									ES	Spanish
									FR	French
									IT	Italian
									PT	Portuguese
<b>Country specific grid settings:</b>									DE	Default Setting VDE-AR-N 4105 (standard)
									OF	Default setting for offgrid operation
									ZZ	Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



**Windy Boy 1200 (WB1200)**

Valid from: as provided in contract

<b>WB 1200 (price before options):</b>	x	x	4	-	xx	xx	Inverter for small wind turbine systems, 1200 Wnom/1200 WMax grid-tied operation, grid frequency 50 Hz/60 Hz (auto-detection)
specific price 1)							
<b>Communication:</b>	5	8	B				without communication interface RS485 SMA Bluetooth®
<b>Color of lid:</b>	0						red (additional colors on request)
<b>Connector:</b>			4				SUNCLIX
<b>Documentation:</b>						DE EN ES FR IT PT	German English Spanish French Italian Portuguese
<b>Country specific grid settings:</b>						DE OF ZZ	DE Default Setting VDE-AR-N 4105 (standard) OF Default setting for offgrid operation ZZ Grid parameter country settings: customer specification (setting code, if available).

**Comments**

1) Can vary depending on options.



## Windy Boy Protection Box

### WBP-Box 400

<b>WBP-Box 400-11</b> (price before options):	x	0	0	x	Rectifier and overvoltage protection for Small wind turbine systems with Windy Boy inverters. Generator input: 3-phase up to 500 VAC, Connection Windy Boys with max. DC input voltage of 400 VDC. Including necessary load resistor
<b>Load resistor:</b>	0				With load resistor
	6				Without load resistor
<b>Documentation:</b>			0		German
			1		English

### WBP-Box 500

<b>WBP-Box 500-11</b> (price before options):	x	0	0	x	Rectifier and overvoltage protection for Small wind turbine systems with Windy Boy inverters. Generator input: 3-phase up to 500 VAC, Connection Windy Boys with max. DC input voltage of 500 VDC Including necessary load resistor
<b>Load resistor:</b>	0				With load resistor
	6				Without load resistor
<b>Documentation:</b>			0		German
			1		English

### WBP-Box 600

<b>WBP-Box 600-11</b> (price before options):	x	0	0	x	Rectifier and overvoltage protection for Small wind turbine systems with Windy Boy inverters. Generator input: 3-phase up to 500 VAC, Connection Windy Boys with max. DC input voltage of 600 VDC. Including necessary load resistor
<b>Load resistor:</b>	0				With load resistor
	6				Without load resistor
<b>Documentation:</b>			0		German
			1		English

### WBP-LR6-20

Load resistor for WBP Box. 400/500/600  
39 Ω/6 KW/IP 23



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