

Contents of Technical Abstract

Product Selection	2-3
Handportables	2-3
Handportable Options	2-5
Desktop Option	2-6
HF Desktop Option	2-7
Light Car Kit Options	2-8
Compact Handsfree Car Kit Option	2-9
Handsfree Car Kit Options	2-10
Data Options	2-11
Product and Module List	2-12
Technical Specifications	2-17
General Specifications of Transceiver NHE-4	2-17
Electrical Specifications	2-18
Transceiver General Specifications	2-18
Transmission Specifications	2-18
Reception Specifications	2-19
General Specifications of Accessories	2-20
Battery Pack BBH-1S	2-20
Battery Pack BBH-1H	2-20
Battery Pack BBH-2S	2-20
Battery Pack BBH-2H	2-20
Battery Pack BBT-1XV (Vibra)	2-21
AC Fast Travel Charger ACH-4E/ACH-4X/ACH-4A	2-21
AC Power Supply ACS-6E/ACS-6X/ACS-6A	2-21
Universal Fast Charger ACP-3	2-22
Cigarette Lighter Charger LCH-2	2-22
Light Desk Stand CHH-2L	2-22
Desktop Charger CHH-2	2-23
Desktop Charger CHH-8	2-23
Mounting Plate MKE-1	2-24
Swivel Mount HHS-1	2-24
Mobile Holder MBH-6	2-24
Compact HF PHF-1	2-24
Cigarette Lighter Cable LCP-2	2-24
Mobile HF Charging Holder MCH-8	2-24
HF Junction Box HFJ-3	2-25
External HF Speaker HFS-6	2-25
HF Microphone HFM-4	2-25
Power Cable PCH-4	2-25
Handset HSU-1	2-26

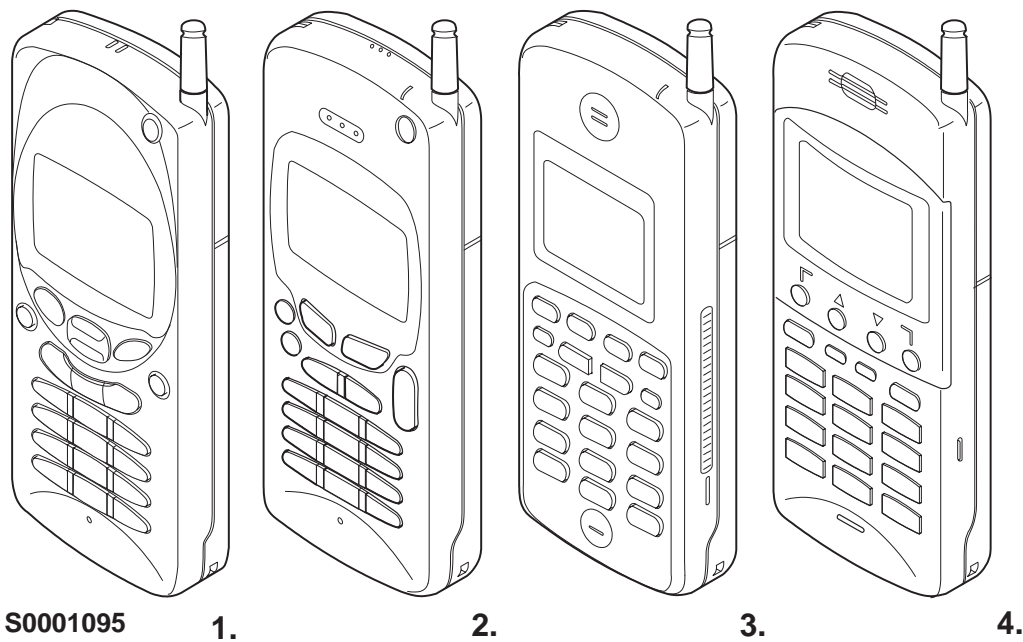


Extension Cable SCE-4	2-26
Antenna Connector Cable XRH-3	2-26
PCMCIA Card DTP-2	2-26
PCMCIA Card DTP-2 ver II	2-26
PC Card Link DKH-3/DKH-3A	2-26
Data Cable DKH-1	2-26
Data Cable DKH-2	2-27
Data Cable DKH-4	2-27
Data Cable DKH-5	2-27
Data Cable DKH-8	2-27

Product Selection

Handportables

The NHE-4 is a handportable cellular phone for the GSM network. GSM is originally a Pan-European digital cellular network standard, later phrased as the Global System for Mobile Communications. The standard is defined jointly by all related parties in the European Telecommunications Standard Institute (ETSI). There are four different design versions for the transceiver.

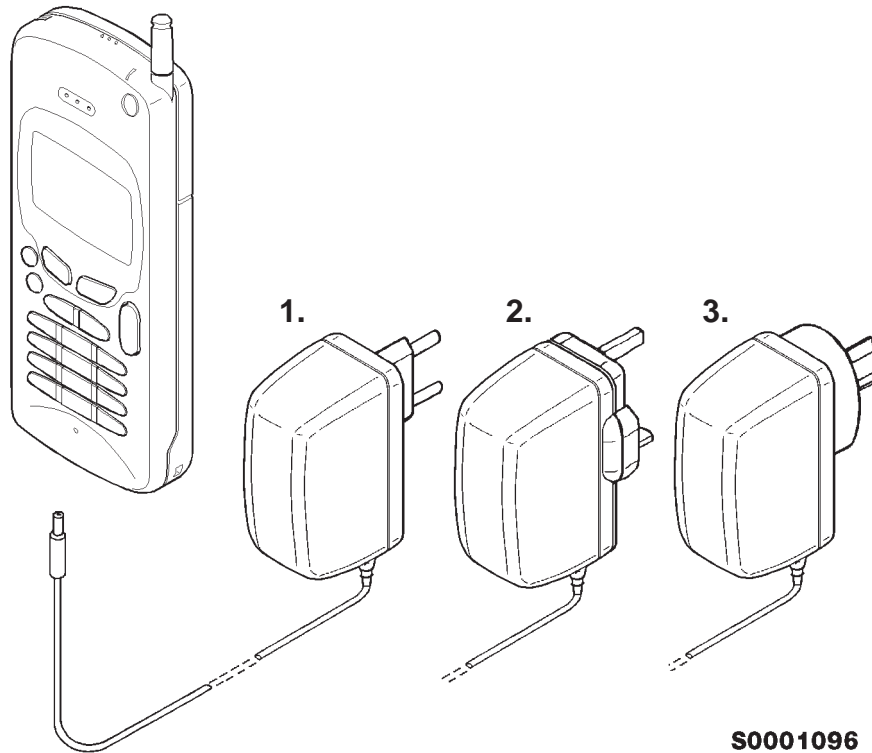


Item/name:	Type code:	Material code:
1. Transceiver Nokia 2110	NHE-4NX	0500312
1. Transceiver Nokia 2110, Greece	NHE-4NX	0500433
1. Transceiver 2110 SIP	NHE-4NX	0500435
1. Transceiver Nokia, Handyphone	NHE-4NX	0500436
1. Transceiver Nokia 2110, D2	NHE-4NX	0500434
1. Transceiver Nokia 2110, Omnitel	NHE-4NX	0500525
1. Transceiver Nokia 2110 (PRC)	NHE-4NX	0500564
1. Transceiver Nokia 2110 D1	NHE-4NX	0500562
1. Transceiver Nokia 2110 Airtel	NHE-4NX	0500563
1. Transceiver Nokia 2110 Network monitor unit	NHE-4NX	0500549
1. Transceiver Nokia 2110 Movistar	NHE-4NX	0500585
1. Transceiver Nokia 2110 FT co-labeled	NHE-4NX	0500625
1. Transceiver Nokia 2110 System co-labeled	NHE-4NX	0500626
1. Transceiver Nokia N2110	NHE-4NX	0500629
1. Transceiver Nokia 2110 SIM lockable	NHE-4NX	0500663

1. Transceiver Nokia 2110 XMAS	NHE-4NX	0501048
1. Transceiver Nokia N2110 PLUS GSM	NHE-4NX	0501133
1. Transceiver Nokia N2110 Pannon Hungary	NHE-4NX	0501152
1. Transceiver Nokia 2110 Korea	NHE-4NX	0501415
1. Transceiver Nokia 2110 D2 Korea	NHE-4NX	0501416
1. Transceiver Nokia 2110 System Korea	NHE-4NX	0501417
2. Transceiver Nokia 2118 (blue)	NHE-4NY	0500314
2. Transceiver Nokia 2118 (black)	NHE-4NY	0500557
2. Transceiver Nokia 2118 PRC	NHE-4NY	0500952
2. Transceiver Nokia 2118 black, Nokia	NHE-4NY	0500960
2. Transceiver Nokia 2118 Korea	NHE-4NY	0501418
2. Transceiver Nokia 2118 black, Korea	NHE-4NY	0501419
3. Transceiver Mobira 5000	NHE-4AX	0500533
3. Transceiver Nokia 5000	NHE-4AX	0500318
3. Transceiver Pocketline Darwin	NHE-4AX	0500439
3. Transceiver Nokia 5000 Korea	NHE-4AX	0501420
4. Transceiver Nokia 880	NHE-4BX	0500316
4. Transceiver Nokia 880, Greece	NHE-4BX	0500475
4. Transceiver Nokia 880 Korea	NHE-4BX	0501421
Transceiver Nokia 2114	NHE-4NC	0500693
Transceiver Philips GSM Handportable	NHE-4PX	0500440

Handportable Options

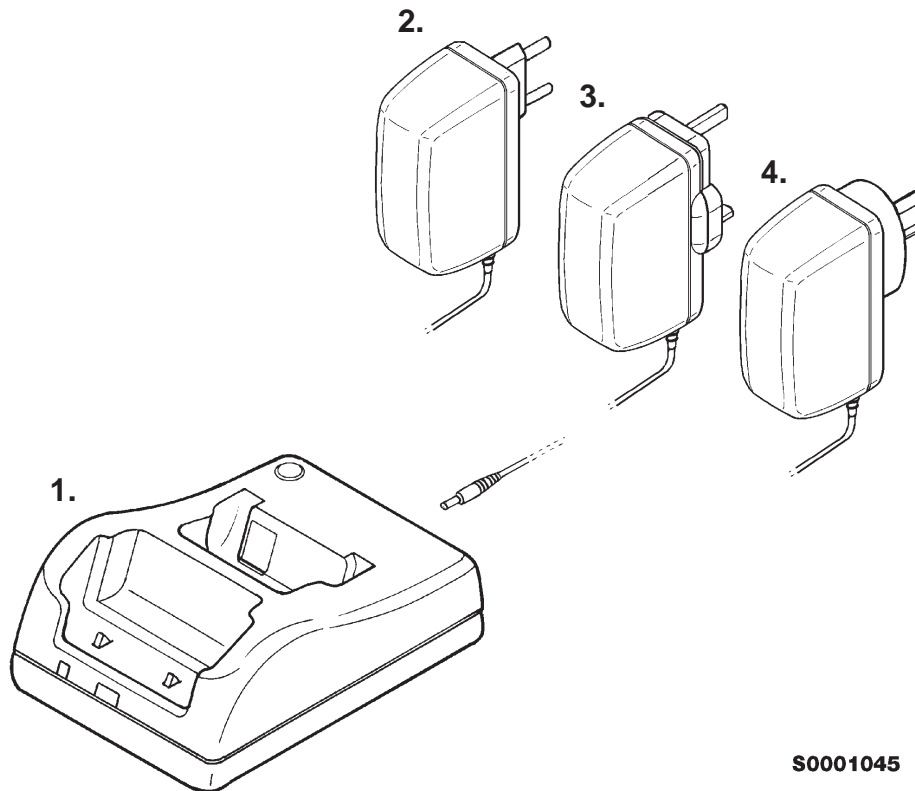
The basic handportable package offers for the user a battery pack and fast travel charger for charging from mains. The package contains the following product:

**S0001096**

Item/name:	Type code:	Material code:
1. Fast travel charger	ACH-4E	0675008
2. Fast travel charger	ACH-4X	0675009
3. Fast travel charger	ACH-4A	0675036

Desktop Option

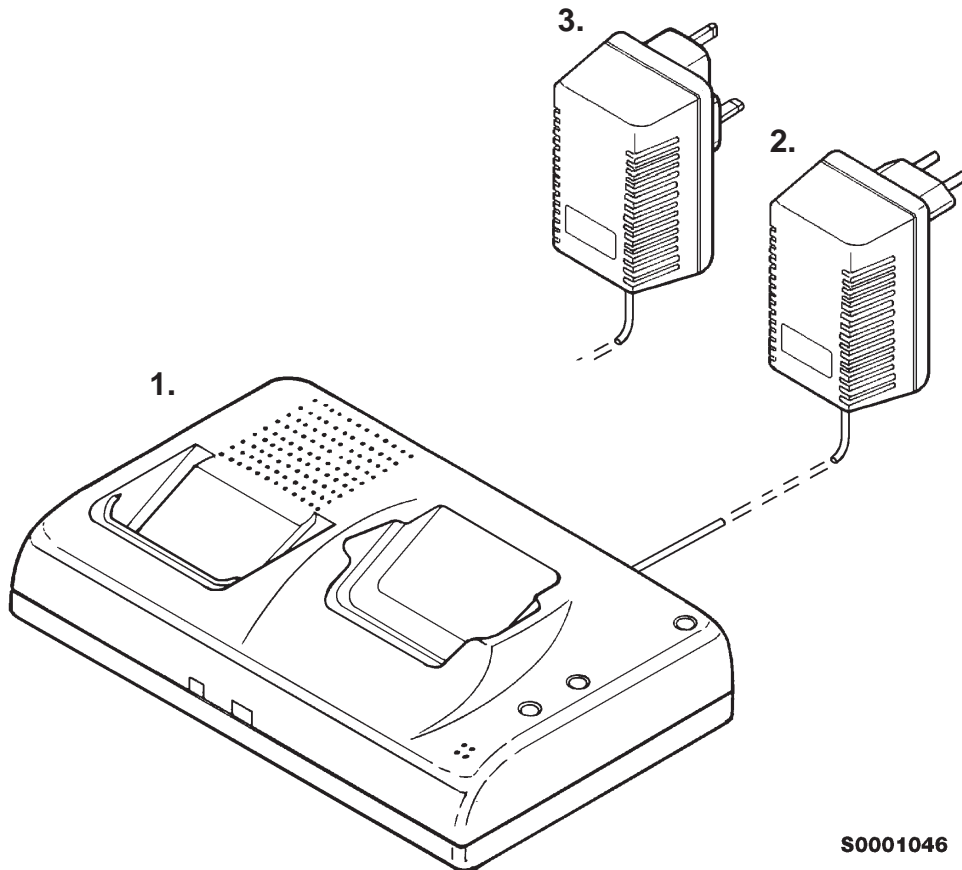
The desktop option allows the user to charge the handportable and spare battery from mains. With this option the user can also discharge the spare battery. The desktop option contains the following product:

**S0001045**

Item/name:	Type code:	Material code:
1. Desktop charger	CHH-2	0675022
2. Fast travel charger (Euro)	ACH-4E	0675008
3. Fast travel charger (UK)	ACH-4X	0675009
4. Fast travel charger (Austr.)	ACH-4A	0675036

HF Desktop Option

This option contains the same functions as the desktop option and also offers a full handsfree functions which can be used when the phone is in the HF desktop charger. The use of the product can be extended for office use with following accessories:

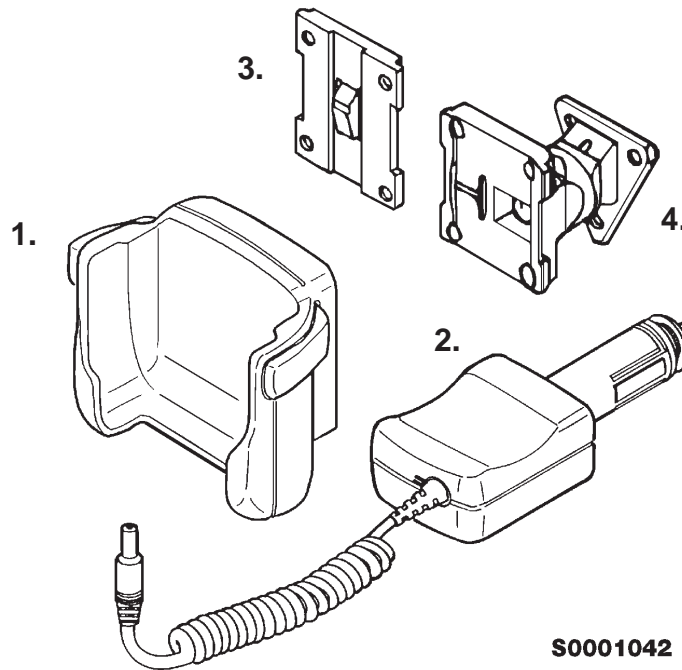


S0001046

Item/name:	Type code:	Material code:
1. HF desktop charger	CHH-8	0675026
2. AC power supply (Euro)	ACS-6E	0680016
3. AC power supply (UK)	ACS-6X	0680019
- AC power supply (Austr.)	ACS-6A	0680021

Light Car Kit Options

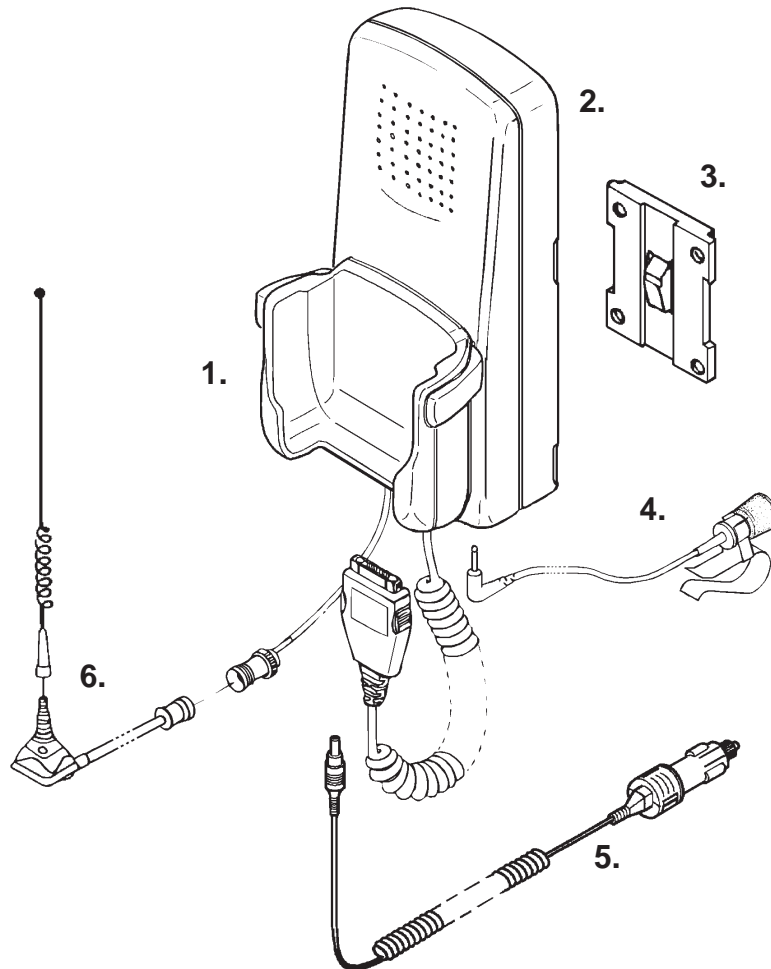
This option offers a passive cradle and charging functions to the user in the car installation. The light car kit option contains the following product:



Item/name:	Type code:	Material code:
1. Mobile holder	MBH-6	0620009
2. Cigarette lighter charger	LCH-2	0675005
3. Mounting plate	MKE-1	0650007
4. Swivel mount	HHS-1	0650006

Compact Handsfree Car Kit Option

This option contains the same functions as the light car kit option and also offers full handsfree and external antenna functions. The use of the product can be extended for car use with the following accessories:

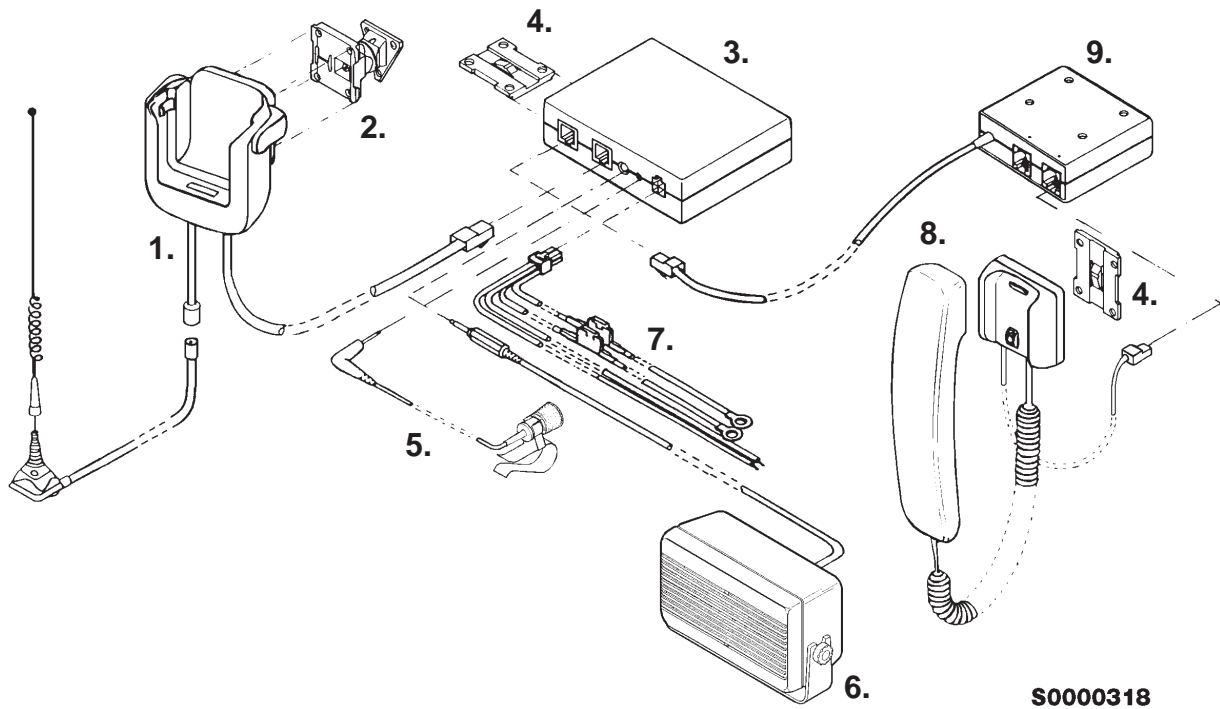


S0001043

Item/name:	Type code:	Material code:
1. Mobile holder	MBH-6	0620009
2. Compact HF unit	PHF-1	0700017
3. Mounting plate	MKE-1	0650007
4. Microphone	HFM-4	0690002
5. Cig. lighter cable	LCP-2	0680022
6. Antenna (does not include in the sales package)		

Handsfree Car Kit Options

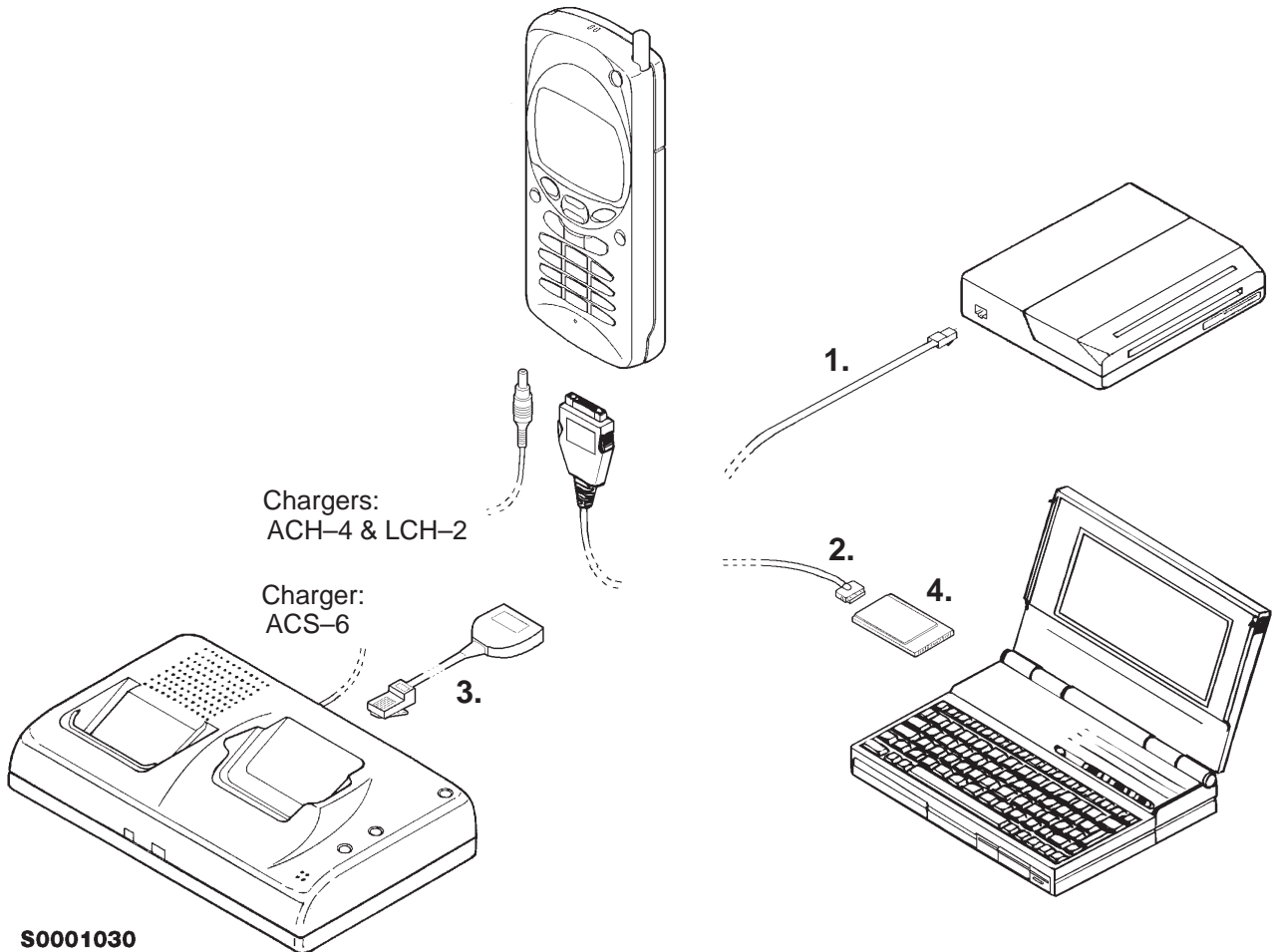
This option offers all possible accessories to the user in the car installation.



Item/name:	Type code:	Material code:
1. Mobile holder	MCH-8	0620010
2. Swivel mount	HHS-1	0650006
3. HF junction box	HFJ-3	0694009
4. Mounting plate	MKE-1	0650007
5. HF microphone	HFM-4	0690002
6. HF speaker	HFS-6	0692005
7. Power cable	PCH-4	0730009
8. Handset	HSU-1	0640047
9. Voice dialer	VDM-2	0694011

Data Options

The data options offers for the user the standard handportable use with different data accessories.



S0001030

Item/name:

Type code:

Material code:

1. Data cable for Ricoh FAX	DKH-8	0730040
2. Data cable for dig. PCMCIA	DKH-4	0730037
3. Data cable	DKH-2	0730041
4. PCMCIA card	DTP-2	0750029

Product and Module List

Unit/type:	Product code:	Module code:
Transceiver NHE-4NX (Nokia 2110)	0500312	
• system module GR8 (not available separately)		0200514
• display module DU8		0200173
• mechanics MNHE4NX		0260492
Transceiver NHE-4NX (Nokia 2110, Greece)	0500433	
• system module GR8 (not available separately)		0200514
• display module DU8		0200173
• mechanics MNHE4NX		0260492
Transceiver NHE-4NX (2110 SIP)	0500435	
• system module GR8 (not available separately)		0200514
• display module DU8		0200173
• mechanics MNHE4NX		0260625
Transceiver NHE-4NX (Nokia Handyphone)	0500436	
• system module GR8 (not available separately)		0200514
• display module DU8		0200173
• mechanics MNHE4NX		0260626
Transceiver NHE-4NX (Nokia 2110, D2)	0500434	
• system module GR8 (not available separately)		0200514
• display module DU8		0200173
• mechanics MNHE4NX		0260624
Transceiver NHE-4NX (Nokia 2110, Omnitel)	0500525	
• system module GR8 (not available separately)		0200514
• display module DU8		0200173
• mechanics MNHE4NX		0260762
Transceiver NHE-4NX (Nokia 2110 Network Monitor)	0500549	
• system module GR8 (not available separately)		0200514
• display module DU8		0200173
• mechanics MNHE4NX		0260492
Transceiver NHE-4NX (Nokia 2110, D1)	0500562	
• system module GR8 (not available separately)		0200514
• display module DU8		0200173
• mechanics MNHE4NX		0260826
Transceiver NHE-4NX (Nokia 2110, Airtel)	0500563	
• system module GR8 (not available separately)		0200514
• display module DU8		0200173
• mechanics MNHE4NX		0260827
Transceiver NHE-4NX (Nokia 2110, PRC)	0500564	
• system module GR8 (not available separately)		0200514
• display module DU8		0200173
• mechanics MNHE4NX		0260492

Transceiver NHE-4NX (Nokia 2110, Movistar) 0500585	
• system module GR8 (not available separately)	0200514
• display module DU8	0200173
• mechanics MNHE4NX	0260884
Transceiver NHE-4NX (Nokia 2110, Itineris) 0500625	
• system module GR8 (not available separately)	0200514
• display module DU8	0200173
• mechanics MNHE4NX	0260927
Transceiver NHE-4NX (Nokia 2110, System) 0500626	
• system module GR8 (not available separately)	0200514
• display module DU8	0200173
• mechanics MNHE4NX	0260924
Transceiver NHE-4NX (Nokia 2110, Korea) 0500629	
• system module GR8 (not available separately)	0200514
• display module DU8	0200173
• mechanics MNHE4NX	0260492
Transceiver NHE-4NX (Nokia 2110 SIM Lockable) 0500663	
• system module GR8 (not available separately)	0200514
• display module DU8	0200173
• mechanics MNHE4NX	0261016
Transceiver NHE-4NX (Nokia 2110, XMAS) 0501048	
• system module GR8 (not available separately)	0200514
• display module DU8	0200173
• mechanics MNHE4NX	0260492
Transceiver NHE-4NX (Nokia N2110 Plus) 0501133	
• system module GR8 (not available separately)	0200514
• display module DU8	0200173
• mechanics MNHE4NX	0261386
Transceiver NHE-4NX (Nokia N2110 Pannon Hungary) 0501152	
• system module GR8 (not available separately)	0200514
• display module DU8	0200173
• mechanics MNHE4NX	0261477
Transceiver NHE-4NY (Nokia 2118, blue) 0500314	
• system module GR8 (not available separately)	0200514
• display module GU3E	0200516
• mechanics MNHE4NY	0260494
Transceiver NHE-4NY (Nokia 2118, black) 0500557	
• system module GR8 (not available separately)	0200514
• display module GU3E	0200516
• mechanics MNHE4NY	0260800
Transceiver NHE-4NY (Nokia 2118 PRC) 0500952	
• system module GR8 (not available separately)	0200514
• display module GU3E	0200516
• mechanics MNHE4NY	0260800

Transceiver NHE-4NY (Nokia 2118, black)	0500960	
• system module GR8 (not available separately)		0200514
• display module GU3E		0200516
• mechanics MNHE4NY		0260800
Transceiver NHE-4AX (Nokia 5000)	0500318	
• system module GR8 (not available separately)		0200514
• display module DU9		0200174
• mechanics MNHE4AX		0260498
Transceiver NHE-4AX (Mobira 5000)	0500533	
• system module GR8 (not available separately)		0200514
• display module DU9		0200174
• mechanics MNHE4AX		0260761
Transceiver NHE-4AX (Pocketline Darwin)	0500439	
• system module GR8 (not available separately)		0200514
• display module DU9		0200174
• mechanics MNHE4AX		0260629
Transceiver NHE-4BX (Nokia 880)	0500316	
• system module GR8 (not available separately)		0200514
• display module DU9		0200174
• mechanics MNHE4BX		0260496
Transceiver NHE-4BX (Nokia 880, Greece)	0500475	
• system module GR8 (not available separately)		0200514
• display module DU9		0200174
• mechanics MNHE4BX		0260496
Transceiver NHE-4NC (Nokia 2114)	0500693	
• system module GR8 (not available separately)		0200514
• display module DU9		0200173
• mechanics MNHE4NC		0261015
Battery pack BBH-1S (550 mAh; NiMH)	0670027	
Battery pack BBH-1H (1500 mAh; NiMH)	0670028	
Battery pack BBH-2S (400 mAh; NiCd)	0670029	
Battery pack BBH-2H (1100 mAh; NiCd)	0670030	
Battery pack BBT-1XV (550 mAh; Vibra)	0670119	
Fast travel charger ACH-4E	0675008	
Fast travel charger ACH-4X	0675009	
Fast travel charger ACH-4A	0675036	
Universal fast charger ACP-3	0675083	
AC power supply ACS-6E	0680016	
AC power supply ACS-6X	0680019	
AC power supply ACS-6A	0680021	

Cigarette lighter charger LCH-2	0675005	
• charging module AL4		0200315
• mechanics MLCH2		0260062
Desktop charger CHH-2	0675022	
• charging module DC2		0200184
• mechanics MCHH2		0260217
HF desktop charger CHH-8	0675026	
• main module DC3		0200211
• connector module DC4		0200235
• mechanics MCHH8		0260218
Mobile holder MBH-6	0620009	
Compact HF PHF-1	0700017	
• charging module DH-3		0200179
• mechanics MPH1		
Cigarette lighter cable LCP-2	0680022	
Mobile HF charging holder MCH-8	0620010	
• charging module DH1		0200182
• mechanics MMCH8		0260220
HF junction box HFJ-3	0694009	
• charging module BC4B		0200180
• mechanics MHFJ3		0260223
External HF speaker HFS-6	0692005	
HF microphone HFM-4	0690002	
Power cable PCH-4 (for HFJ-3)	0730009	
Handset HSU-1	0640047	
• handset module DG1		0200221
• mechanics MHSU1		0260222
Voice recognition unit VDM-2	0694011	
PCMCIA card DTP-2	0750029	
• interface module DP1		0200272
PCMCIA card DTP-2 ver II	0750091	
• Data Cable DLM-1		0730086
• Setupkit for Data Card DLH-5		0630081
• Setupkit Diskette DLH-5		0630082
PC Card Link DKH-3 (25 pin connector)	0730036	
PC Card Link DKH-3A (9 pin connector)	0730022	
Data cable DKH-1 (modular-modular)	9780084	
Data cable DKH-2 (modular-DKH-3...8)	0730041	
Data cable DKH-4 (hp-digital PCMCIA card)	0730037	

Data cable DKH-5 (hp-DAU-2)	0730038
Data cable DKH-8 (hp-Ricoh FAX)	0730040
Carry strap SWH-1	0720005
Belt clip BCH-2	0720022
Carry bag CBH-5XN	0720020
Antenna connector cable XRH-3	

Technical Specifications

General Specifications of Transceiver NHE-4

Temperature range:	-20...+55° C
Operating time	
• talk time (BBH-1S):	90 min
• talk time (BBH-1H):	240 min
• standby time (BBH-1S):	24 h
• standby time (BBH-1H):	65 h
Supply voltage:	5.3...8.8 V
Nominal current consumption	
• call mode (2 W):	350 mA
• scanning mode:	200 mA
• idle mode (paging period 8):	17 mA
• idle mode (paging period 2):	23 mA
• power off:	0.5 mA
Dimensions (h x w x d)	
• NHE-4NX/BX transceivers + BBH-1S:	148 x 56 x 25
• NHE-4AX transceiver + BBH-1S:	148 x 56 x 23
Weight (NHE-4NX)	
• transceiver + BBH-2S:	230 g
• transceiver + BBH-1S:	233 g
• transceiver + BBH-2S:	291 g
• transceiver + BBH-1H:	317 g

Electrical Specifications

Transceiver General Specifications

RX frequency band:	<i>935...960 MHz</i>
TX frequency band:	<i>890...915 MHz</i>
Power class:	<i>4</i>
Output power:	<i>0.02...2 W</i>
Duplex spacing:	<i>45 MHz</i>
Method of frequency synthesis:	<i>two digital PLLs</i>
Frequency control:	<i>VCTCXO</i>
Receiver type:	<i>two IF, linear</i>
Receiver IF:	<i>71 and 13 MHz</i>
Modulator type:	<i>I/Q modulator</i>
Number of RF channels:	<i>124</i>
Channel spacing:	<i>200 kHz</i>
Number of TX power levels:	<i>11</i>
Sensitivity:	<i>-102 dBm/S/N > 8 dB</i>
Frequency error:	<i>±0.1 ppm</i>
RMS phase error:	<i>5.0</i>

Transmission Specifications

TX frequency band:	<i>890...915 MHz</i>
Modulator type:	<i>I/Q modulator</i>
Power class:	<i>4</i>
Output power:	<i>20 mW...2 W</i>
Power levels:	<i>11</i>
Power level steps:	<i>2 dB ±1.5 dB</i>
Error at 2.0 W power :	<i>< ±2 dB (at extreme temp. ±2.5 dB)</i>
Error at other power levels:	<i>< ±3 dB (at extreme temp. ±4 dB)</i>
Frequency error:	<i>< ±0.1 ppm (with AFC)</i>
RMS phase error:	<i>< 5.0</i>
Peak phase error:	<i>< 20.0</i>

Spurious emissions

- allocated a channel in freq.band: *9 kHz...1 GHz < -36 dB
1...12.75 GHz < -30 dBm*
- idle mode in frequency band: *9 kHz...1 GHz < -57 dB
1...12.75 GHz < -47 dBm*
- spurious for receiving band: *935...960 MHz < -84 dBm
except for 5 channels*

Reception Specifications

RX frequency band:	<i>935...960 MHz</i>
Type:	<i>linear, two IF</i>
IFs:	<i>71 and 13 MHz</i>
Sensitivity:	<i>-102 dBm RX channel input, I/Q S/N ratio > 8 dB, BN = 135 kHz</i>
AGC dynamic range:	<i>85 dB</i>
Receiver gain (Voltage gain)	<i>66 dB</i>
Input dynamic range:	<i>-102 dBm...-10 dBm</i>
I/Q output (-102...0 dBm) RXI&RXQ	<i>10 mVpp – 25 mVpp</i>
Gain relative accuracy in receiving band:	<i>1 dB (reported RXlevel)</i>
Gain relative accuracy on channel:	<i>1 dB within every 20 dB range</i>

General Specifications of Accessories

Battery Pack BBH-1S

Dimensions (h x w x d):	<i>101 x 56 x 8 mm</i>
Weight:	<i>105 g</i>
Capacity:	<i>550 mAh</i>
Cells:	<i>5</i>
Quick charging temperature:	<i>+5...45° C</i>

Battery Pack BBH-1H

Dimensions (h x w x d):	<i>101 x 56 x 20 mm</i>
Weight:	<i>190 g</i>
Capacity:	<i>1500 mAh</i>
Cells:	<i>5</i>
Quick charging temperature:	<i>+5...45° C</i>

Battery Pack BBH-2S

Dimensions (h x w x d):	<i>101 x 56 x 8 mm</i>
Weight:	<i>102 g</i>
Capacity:	<i>400 mAh</i>
Cells:	<i>5</i>
Quick charging temperature:	<i>+5...45° C</i>

Battery Pack BBH-2H

Dimensions (h x w x d):	<i>101 x 56 x 20 mm</i>
Weight:	<i>165 g</i>
Capacity:	<i>1100 mAh</i>
Cells:	<i>5</i>
Quick charging temperature:	<i>+5...45° C</i>

Battery Pack BBT-1XV (Vibra)

Dimensions (h x w x d):	<i>101 x 56 x 15 mm</i>
Weight:	<i>120 g</i>
Capacity:	<i>550 mAh</i>
Cells:	<i>5</i>
Quick charging temperature:	<i>+5...45°C</i>

AC Fast Travel Charger ACH-4E/ACH-4X/ACH-4A

Dimensions (h x w x d):	<i>52 x 35 x 73 mm</i>
Weight:	<i>95 g</i>
Mains plug type:	<i>Euro / UK / Australia</i>
Output d.c. connector type:	<i>Standard d.c. connector 3.8 mm</i>
Length of cable:	<i>2 m ±10 %</i>
Input voltage:	
• ACH-4E	<i>230 V a.c. ±10 % 50 Hz</i>
• ACH-4X	<i>240 V a.c. ±10 % 50 Hz</i>
Output voltage:	<i>12 ±1 V</i>
Output current:	<i>800 ±70 mA</i>
Charging time	
• BBH-1S (uncharged → 80 % full):	<i>40 min</i>
• BBH-1H (uncharged → 80 % full):	<i>1 h 45 min</i>
Protection:	<i>output current limiting, max. 870 mA & volt. limiting, max. 13.5 V(unload.)</i>

AC Power Supply ACS-6E/ACS-6X/ACS-6A

Dimensions (h x w x d):	
Weight:	<i>< 500 g</i>
Mains plug type:	<i>Euro / UK / Australia</i>
Output d.c. connector type:	<i>Standard d.c. connector 5.5 mm</i>
Length of cable:	<i>2.0 m</i>
Input voltage:	<i>230...240 V a.c. ±10 %</i>
Output voltage:	<i>13.8 V</i>
Output current:	<i>900 mA</i>
Protection:	<i>output current limit</i>

Universal Fast Charger ACP-3

Dimensions (h x w x d):	<i>65 x 27 x 27 mm</i>
Weight:	<i>120 g</i>
Mains plug type:	<i>Detachable a.c. cord to match any plug with local a.c. cord</i>
Output d.c. connector type:	<i>Standard d.c. connector 3.8 mm</i>
Length of cable:	<i>2 m ±10 %</i>
Input voltage:	<i>100...240 V a.c.</i>
Protection:	

Cigarette Lighter Charger LCH-2

Dimensions (h x w x d):	<i>28 x 44 x 110 mm</i>
Weight:	<i>120 g</i>
Cig. lighter connector plug type:	<i>D 21/23 mm</i>
Output d.c. connector type:	<i>Standard d.c. connector 3.8 mm</i>
Length of spiral cable:	<i>2.0 m</i>
Input voltage:	<i>9...32 V d.c.</i>
Output voltage:	<i>5.0... 10.0 V/800 mA 12.5 V ±1.0 V/0...400 mA</i>
Protection:	<i>Input fused, output current limit</i>

Light Desk Stand CHH-2L

Dimensions (h x w x d):	<i>x x mm</i>
Weight:	<i>g</i>
Input voltage (from ACH-4):	<i>9...18 V d.c.</i>
Input d.c. connector type:	<i>Standard d.c. connector 3.8 mm</i>
Protection:	<i>Output current limit, max. 870 mA</i>

Desktop Charger CHH-2

Dimensions (h x w x d):	<i>37 x 71 x 99.5 mm</i>
Weight:	<i>65 g</i>
Input voltage (from ACH-4):	<i>9...18 V d.c.</i>
Input d.c. connector type:	<i>Standard d.c. connector 3.8 mm</i>
Output voltage to phone	
• constant voltage:	<i>12.0 ± 1 V at 0 to 800 mA</i>
• constant current:	<i>800 ± 70 mA within 5...10 V</i>
Discharge current:	<i>135 mA ± 30 mA nominal</i>
Discharge end voltage:	<i>5 V (1 V/cell) ± 4 %</i>
Protection:	<i>Output current limit, max. 870 mA</i>
Charging time	
• BBH-1S (uncharged → 80 % full):	<i>40 min</i>
• BBH-1H (uncharged → 80 % full):	<i>1 h 45 min</i>
Discharge time	
• BBH-1S:	<i>2 h 30 min</i>
• BBH-1H:	<i>9 h</i>

Desktop Charger CHH-8

Dimensions (h x w x d):	<i>43 x 167 x 113 mm</i>
Weight:	<i>360 g</i>
Input voltage (from ACS-6U):	<i>11...20 V d.c.</i>
Input d.c. connector type:	<i>Standard d.c. connector 5.5 mm</i>
Output voltage to phone	
• constant voltage:	<i>12.0 ± 1 V at 0 to 800 mA</i>
• constant current:	<i>800 ± 70 mA within 5...10 V</i>
Protection:	<i>Output current limit, max. 870 mA</i>
Charging time	
• BBH-1S (550 mAh):	<i>55 min</i>
• BBH-1H (1500 mAh):	<i>2 h</i>
• BBH-2S (400 mAh):	<i>45 min</i>
• BBH-2H (1100 mAh):	<i>2 h 40 min</i>
Discharge time	
• BBH-1S (550 mAh):	<i>4 h 20 min</i>
• BBH-1H (1500 mAh):	<i>13 h</i>
• BBH-2S (400 mAh):	<i>3 h 30 min</i>
• BBH-2H (1100 mAh):	<i>10 h</i>

Mounting Plate MKE-1

Dimensions (h x w x d):	<i>7.3 x 45 x 48 mm</i>
Weight:	<i>8 g</i>

Swivel Mount HHS-1

Dimensions (h x w x d):	<i>73 x 69 x 51.5 mm</i>
Weight:	<i>30 g</i>

Mobile Holder MBH-6

Dimensions (h x w x d):	<i>73 x 69 x 51.5 mm</i>
Weight:	<i>62 g</i>

Compact HF PHF-1

Dimensions (h x w x d):	<i>160 x 68 x 35 mm</i>
Weight:	<i>320 g</i>
Cable length:	<i>610 mm</i>
Input voltage:	<i>9...15 V, protected up to 24 V</i>

Cigarette Lighter Cable LCP-2

Length of cable:	<i>0.9 m</i>
------------------	--------------

Mobile HF Charging Holder MCH-8

Dimensions (h x w x d):	<i>88 x 69 x 51.5 mm</i>
Weight:	<i>115 g</i>
Length of antenna cable:	
Length of system cable:	

HF Junction Box HFJ-3

Dimensions (h x w x d):	<i>31 x 87 x 123 mm</i>
Weight:	<i>270 g</i>
Input voltage:	<i>9...16 V</i>
Current consumption	
• power off mode:	<i>< 1 mA</i>
• power down mode:	<i>< 1 mA</i>
• power on mode:	<i>< 3 A</i>
Output voltages	
• charger voltage:	<i>11...13 V/800 mA</i>
• accessory voltage:	<i>8.5...16 V/800 mA</i>
Speaker output voltage:	<i>4 W/4 Ω</i>

External HF Speaker HFS-6

Dimensions (h x w x d):	<i>75 x 123 x 46 mm</i>
Weight:	<i>305 g</i>
Cable length:	<i>2 m</i>
Frequency range:	<i>0.25...3.5 kHz</i>
Sensitivity:	<i>82 ±3 dB</i>

HF Microphone HFM-4

Dimensions (h x w x d):	<i>32 x 30 x 20 mm</i>
Weight:	<i>32 g</i>
Connector type:	<i>2.5 mm plug, angle type</i>
Cable length:	<i>3 ±0.2 m</i>
Frequency range:	<i>0.3...8.0 kHz</i>
Sensitivity:	<i>65 ±4 dB</i>
Sensitivity curve:	<i>directional</i>

Power Cable PCH-4

Length:	<i>4.3 m</i>
Protection fuses:	<i>2 x 4 A</i>

Handset HSU-1

Dimensions (h x w x d):	<i>25 x 36 x 181 mm</i>
Weight (with spiral cable):	<i>app. 120 g</i>
Nominal supply voltage:	<i>13 V</i>
Nominal current consumption:	<i>10 mA</i>

Extension Cable SCE-4

Length:	<i>1.0 m</i>
---------	--------------

Antenna Connector Cable XRH-3

Length:	
---------	--

PCMCIA Card DTP-2

Dimensions (h x w x d):	<i>54 x 85.6 x 5 mm</i>
Data services:	<i>300...9600 (except 1200/75) bit/s async data, automatic fax teleservice, short message data service (SMS), access to packet network</i>

PCMCIA Card DTP-2 ver II

Dimensions (h x w x d):	<i>54 x 85.6 x 5 mm</i>
Data services:	<i>300...9600 (except 1200/75) bit/s async data, automatic fax teleservice, short message data service (SMS), access to packet network</i>

PC Card Link DKH-3/DKH-3A

Length:	
PC connector type	
• DKH-3:	<i>25 pin female D-connector</i>
• DKH-3A:	<i>9 pin female D-connector</i>

Data Cable DKH-1

Length:	<i>1 m</i>
Weight:	<i>23 g</i>

Data Cable DKH-2

Length: *150 mm*
Weight: *19 g*

Data Cable DKH-4

Length: *600 mm*
Weight: *27 g*

Data Cable DKH-5

Length: *600 mm*
Weight: *26 g*

Data Cable DKH-8

Length: *600 mm*
Weight: *28 g*



This page intentionally left blank.