made for experts

Unit 111, Dunston Innovation Centre
Chesterfield, S41 8NG, U.K.
Tel: + 44 (0) 1246 452909
Fax: + 44 (0) 1246 452942
Web: www.etps.co.uk
Email: sales@etps.co.uk
Sales: 0800 612 95 75

INV-W

Heavy Duty & Railroad Inverters

Description

The INV-W is a series of wall mounting inverters that produce a true microprocessor controlled sinewave output. A variety of DC inputs are available from 24Vdc to 220Vdc. The inverters are housed in compact metal cases with IP54 classification. Heavy duty 2 part connectors with mechanical fastenings are used for the input and output. convection cooling is provided via a heat sink on the wall mount side. The INV-WR 400 & INV-WR 500 are built to meet environmental rail standards making the units ideal for low power locomotive applications. For higher power rail road applications a separate summary detailing the INV-R range is available. Each of these robust units is covered by a 24 month warranty.

- Shortcircuit & overload protection
- No 50Hz transformer
- Railroad versions
- Potential free

Selection Table

Part Number	Maximum Power	Input Voltage	Output Voltage	Output Frequency
INV-W 400-24	400VA	24VDC	230VAC	50Hz
INV-W 400-24-1	400VA	24VDC	115VAC	60Hz
INV-WR 400-24*	400VA	24VDC	230VAC	50Hz
INV-WR 400-24-1*	400VA	24VDC	115VAC	60Hz
INV-W 500-48-60	500VA	48/60VDC	230VAC	50Hz
INV-W 500-48-60-1	500VA	48/60VDC	115VAC	60Hz
INV-W 500-110	500VA	110VDC	230VAC	50Hz
INV-W 500-110-1	500VA	110VDC	115VAC	60Hz
INV-W 500-220	500VA	220VDC	230VAC	50Hz
INV-W 500-220-1	500VA	220VDC	115VAC	60Hz
INV-WR 500-48-60*	500VA	48/60VDC	230VAC	50Hz
INV-WR 500-48-60-01*	500VA	48/60VDC	115VAC	60Hz
INV-WR 500-110*	500VA	110VDC	230VAC	50Hz
INV-WR 500-110-01*	500VA	110VDC	115VAC	60Hz
INV-WR 500-220*	500VA	220VDC	230VAC	50Hz
INV-WR 500-220-01*	500VA	220VDC	115VAC	60Hz

*According to rail norm EN 50155

made for experts

sales@etps.co.uk
0800 612 95 75

INV-W

Heavy Duty Inverter

Technical Data

Output	INV-W 400	INV-W 500	INV-WR 400	INV-WR 500
Output Power	400VA/320W	500VA/400W	400VA/320W	500VA/400W
Voltage	230VAC, failure tolerance ±5% (Option /1 for 115Vac, 60Hz)			
Frequency	50Hz (Option /1 for 115Vac, 60Hz)			
Power Factor	0.8			
Load Range	0 - 100%			
Crestfactor	> 2.5			
Harmonic Distortion	< 3%			
Input Range				
24Vdc	24 (19 - 31)VDC	—	24 (19 - 31)VDC	—
48/60Vdc	—	48/60 (38 - 72)VDC	—	48/60 (38 - 72)VDC
110Vdc	—	110 (88 -132)VDC	—	110 (77 -143)VDC
220Vdc	—	220 (178 - 264)VDC	—	220 (178 - 264)VDC
General				
Electrical Safety	EN 60950, VDE 0805 (overload & shortcircuit protected)			
Efficiency	85% at nominal load	87% at nominal load	85% at nominal load	87% at nominal load
Galvanic Isolation	3.75 kVDC			
EMC (Emission)	EN 50081-1, Curve EN 55022B			
EMC (Immunity)	EN 50082-2			
Environmental	—		EN 50155, EN50121-3-2)	
Operating Temperature	-25 to +45°C (non condensing)		-25ºC to +70ºC (non condensing)	
Housing				
Casing	Wall mounting case			
Size	270 x 115 x 255mm (W x H x D)			
Weight	Approx. 5kg			
Classifiaction	IP 54			
Ventilation	Convection via heatsink on wall side			
Electrical Connections				
Connector Position	Bottom of unit			
DC Input	Harting connector HAN Q5, 3-pole			
AC Output	Harting connector HAN Q5, 3-pole			
Signals	Binder round connector DIN 45322 (HAN 80 5-pole opt.)		HAN 80, 5-pole (Binder DIN 45322 opt.)	
Earthing	Via Harting HAN Q5 (DC-IN) earthing screw on the case			
Other				
Optical Signals	Power/PG, Overload/OVL		Option 6: Power/PG, Overload/OVL	
Signal Output	Voltage free alarm contact		Option 6: Voltage free alarm contact	
Operation	Switch		For Option 6 Switch used	
Control Input	Option 5: HAN 80 for remote operation		HAN 80 for remote operation (optocoupler input)	
Warranty	2 Years			

Options Table

Code	Description
/1	Unit built with 115Vac, 60Hz output
/5	HAN 80 input for remote operation
/6	Power/PG, Overload/OVL signals (diodes), switch operated