

4 Technical Data

Input - Electrical data

Model	1501xi	2501xi*	3501xi	4501xi	5001xi**
DC rated power	1580 W	2630 W	3490 W	4880 W	4880 W
Max. PV generator power	2000 W	3100 W	4000 W	6000 W	6000 W
MPP range	125 – 400 V _{DC}				
No-load voltage	Up to 500 V _{DC}				
Monitoring - input voltage	Stand-by from U _e < 125 V _{DC} Night shutdown from U _e < 80 V _{DC}				
DC voltage ripple	< 3 % eff				
Max. DC input current	13.9 A _{DC}	23.2 A _{DC}	30.5 A _{DC}	43.0 A _{DC}	43.0 A _{DC}
Polarity safeguard	Short-circuit diode				
Overvoltage protection	Varistors				

Output - Electrical data

Model	1501xi	2501xi*	3501xi	4501xi	5001xi**
Rated power	1500 W	2500 W	3300 W	4600 W	4600 W
Maximum power	1650 W	2750 W	3600 W	5060 W	5100 W
Line voltage	See section 4 – Technical Data – Country-specific setting of parameters				
Rated current	6.5 A	10.9 A	14.5 A	20.0 A	20.0 A
Max. current	7.2 A	12.0 A	15.7 A	22.0 A	22.0 A
Power factor	≈1				
Frequency	See section 4 – Technical Data – Country-specific setting of parameters				
Distortion factor according to VDE0838 part 2 (EN 61000-3-2)	< 3 % at rated power < 5 % over the entire range				
Fault signal relay	Potential-free NO contact (make contact), max. 30 V / 1 A				
S0 output	Open collector – output max. 30 V / 50 mA				

* available only in France ** available only in Korea and Spain

Inverter – Electrical data

Model	1501xi	2501xi*	3501xi	4501xi	5001xi**
Max. degree of efficiency	95.0%	95.0 %	95.0 %	94.8 %	94.8 %
European deg. of efficiency	94.3%	94.1 %	94.1 %	94.0 %	94.0 %
Internal consumption	Night shutdown: 0 W Operation: < 5 W				
Minimum grid feed power	10 W	25 W	25 W	40 W	40 W
Circuit design	Self-inverted, galvanically isolated, RF transformer				
Clock frequency	18 kHz				
Principle	1. Galvanically isolated DC/DC converter 2. Single-phase IGBT full bridge				
Grid monitoring	Automatic disconnection device in accordance with DIN VDE 0126-1-1:2006-02				

Inverter - Mechanical and technical data

Model	1501xi	2501xi*	3501xi	4501xi	5001xi**
Visual displays	LED: PV generator (green) LCD (2 x 16 characters)		Grid feed (green)	Fault (red)	
Controls	2 keys for operating the display				
Connections	PCB terminals inside the unit Cable connection via cable fittings				
Ambient temperature	-20 °C ... +60 °C (> 40 °C power derating at high ambient temperature)				
Temperature monitoring	> 70 °C > 75 °C	> 80 °C (temperature-dependent impedance matching) > 85 °C (disconnection from the grid)			
Cooling	Free convection (no fan)				
Protection class	IP54 according to EN 60529				
Noise emission	< 35 dB (noiseless)				
Housing	Aluminium wall-mounting housing				
Dimensions W x D x H	340 x 200 x 450 mm	340 x 220 x 500 mm	340 x 220 x 500 mm	340 x 220 x 650 mm	340 x 220 x 650 mm
Weight	14.0 kg	23.9 kg	23.9 kg	29.8 kg	29.8 kg

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