



POWER MODULE 3KW



FEATURES

- ◆ Up to 3kW Output Capacity.
- ◆ Designed to Optimise Energy Conversion Efficiency.
- ◆ Electrical Isolation Between High and Low Voltage Components.
- ◆ Prevent Short Circuits and Protect Against Overcurrent Conditions.
- ◆ Efficient Thermal Management.

APPLICATIONS



Fast Charging Station |
On-board Charger |
Battery Charger

TECHNICAL SPECIFICATIONS

AC Input

Voltage Range	230 VAC ± 10% (P+N+PE)
Frequency	50 Hz
Current Range	19 A
Power Factor	≥ 0.99
Efficiency	≥ 96%
Total Harmonic Distortion (THD)	Half Load not Exceed 8% & Full Load not Exceed 5%

DC Output

Voltage Range	43.2 to 58 VDC
Current Range	0 to 50 A
Power Output	3 kW (3000 W)
Peak to Peak Ripple Value	< 200 mV (Bandwidth: 20 MHz)
Over Voltage Protection	61 to 63 VDC Dead Lock (Not Self Recovery)
Load Current Sharing	± 3%

Interface

Communication Protocol	Modbus (RS-485) / CAN
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Protection

Over Temperature Protection	Minimum 85°C Typical 90°C Maximum 95°C
Input Over Voltage Protection	Typical 300 VAC
Input Under Voltage Protection	Minimum 81 VAC Maximum 87 VAC
Output Over Voltage Protection	Minimum 61 VDC Typical 62 VDC Maximum 63 VDC
Short Circuit Protection	Self-Recovery (Power Consumption ≤ 50 W)
Anti-reverse Connection	Built-in
Fuse	Built-in

Environment

Operating Temperature	-10°C to 40°C
Storage Temperature	-40°C to 60°C
Humidity	5% to 95%
Altitude	≤ 2000 m, derating above 2000 m
Cooling Method	Fan Cooling

Mechanical

Dimension (L X B X H)	248.50 X 132 X 43.5 mm
Weight	3 kg

