



2500 / 3600 / 4600 W Inverter

The Solar Cynergy 2500~5000 series is suitable for various rooftops and small scale photovoltaic grid-connected power plants. The nominal output powers of the range are 2.5 kW, 3 kW, 3.6 kW, 4 kW, 4.6 kW and 5 kW respectively.

This series is transformerless and has a wide range of MPPT input voltage. The maximum conversion efficiency and MPPT tracking accuracy reach 97.6 % and 99.5 % respectively. The maximum DC voltage reaches 580 V. The 2.5 kW to 5 kW inverters have 2 string MPP trackers, which maximizes flexibility and system efficiency. The new technology in this series supports the adjustable power factor and meets the VDE-AR-N 4105 standard.



Features:

Efficient

- Transformerless
- 2 string MPP trackers

Safe

- Integrated DC switch (optional)
- Comprehensive protection functions

Flexible

- Graphic display
- Easy standards setting
- Reactive power supply
- For indoor and outdoor installation

Simple

- Optional Bluetooth technology
- 'Plug and Play' connection for easy installation
- Easy hanging installation

	Solar Cynergy 2500	Solar Cynergy 3600	Solar Cynergy 4600
Input Data			
Max. DC Power	2700 W	3800 W	4800 W
Max. DC Voltage	500 V	600 V	600 V
System Start-up Voltage	150 V	150 V	150 V
Full Load Voltage Range MPPT	180 V - 400 V	200 V - 480 V	200 V - 480 V
Shutdown Voltage	70 V	70 V	70 V
Max. Input Current	13.5 A	15 A / 15 A	15 A / 15 A
DC Voltage Ripple	< 5 %	< 5 %	< 5 %
Number of MPP Trackers/ Strings Per MPP Trackers	2 / 1	2 / 1	2 / 2
Output Data			
Nominal AC Output	2300 W	3600 W	4600 W
Max. AC Power	2500 W	3600 W	4600 W
Max. Output Current	12.5A	16 A	23 A
THD of AC Current	< 3.0 %	< 3.0 %	< 3.0 %
Nominal Grid Voltage Range	180 V - 280 V	180 V - 280 V	180 V - 280 V
Nominal Grid Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Number of Feed-in Phases	single-phase	Single-Phase	Single-Phase
Adjustable Displacement Factor	0.8 overexcited...0.8 underexcited	0.8 overexcited...0.8 underexcited	0.8 overexcited...0.8 underexcited
Efficiency			
Max. Efficiency	96.7 %	97.0 %	97.50 %
Euro Efficiency	95.5 %	96.0 %	97.0 %

MPP Efficiency	> 99.5 %	> 99.5 %	> 99.5 %
Device Protection			
Reverse Polarity Protection	Yes	Yes	Yes
DC-Switch	No	No	Yes
Short-Circuit Proof	Yes	Yes	Yes
Ground Fault Monitoring	Yes	Yes	Yes
Grid Monitoring	Yes	Yes	Yes
Over-Voltage Protection	Yes	Yes	Yes
Over-Current Protection	Yes	Yes	Yes
Active Anti-Islanding	Yes	Yes	Yes
Leakage Current Detection	Yes	Yes	Yes
General Data			
Dimensions (W / H / D) in mm	494/389/196	494/389/196	494/389/196
Weight	15 kg	23.5 kg	23.5 kg
Ambient Temperature	- 25°C ... +60°C	- 25°C ... +60°C	- 25°C ... +60°C
Working Altitude	< 3000 m	< 3000 m	< 3000 m
Noise Development	< 30 dB	< 30 dB	< 30 dB
Power Consumption Night	< 0.2 W	< 0.2 W	< 0.2 W
Power Consumption Standby	4 W	4 W	4 W
Topological Structure	Transformerless	Transformerless	Transformerless
Cooling	Fan	Fan	Fan
IP Degree of Protection	IP65	IP65	IP65
DC Connections	MC4	MC4	MC4
AC	Plug connector	Plug connector	Plug connector
Graphics	Yes	Yes	Yes
Optional	RS485 / Bluetooth	RS485 / Bluetooth	RS485 / Bluetooth
Standard	5 years	5 years	5 years
Certificates	CE / VDE 4105 / AS / CEI / G83 / G59		

