



**Efficient**

- Transformerless
- 2 string MPP trackers

**Safe**

- Integrated DC switch
- Comprehensive protection functions

**Flexible**

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

**Simple**

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

## SOLARTEC D 3000 / 4000 / 5000

The Solartec D 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. All the range comes complete with an integrated DC switch.

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 550 V.

Its graphic LCD display facilitates easy operation. It has waterproof direct plug-in terminals and overvoltage, overcurrent and ground fault detection. The units also have functions that detect islanding, short circuit, overloading, leakage current, reverse polarity and overheating. Its IP65 protection degree will ensure that it runs well in tough environments.

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.

## >> Specifications

Input Data	Solartec D 3000	Solartec D 4000	Solartec D 5000
Max. DC Power	3200 W	4300 W	5200 W
Max. DC Voltage	580 V	580 V	580 V
System Start-up Voltage	150 V	150 V	150 V
Full Load Voltage Range MPPT	200 V – 480 V	200 V – 480 V	250 V – 480 V
Shutdown Voltage	70 V	70 V	70 V
Max. Input Current	10 A / 10 A	15 A / 15 A	15 A / 15 A
DC Voltage Ripple	< 5.0 %	< 5.0 %	< 5.0 %
Number of MPP Trackers/Strings Per MPP Trackers	2 / 1	2 / 2	2 / 2
<b>Output Data</b>			
Nominal AC Output	3000 W	4000 W	4900 W
Max. AC Power	3200 W	4200 W	5000 W
Max. Output Current	16 A	21 A	25 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	
<b>Efficiency</b>			
Max. Efficiency	97.5 %	97.50 %	97.50 %
Euro Efficiency	97.0 %	97.0 %	97.0 %
MPP Efficiency	> 99.5 %	> 99.5 %	> 99.5 %
<b>Device Protection</b>			
Reverse Polarity Protection	Yes	Yes	Yes
DC-Switch	Optional	Optional	Optional
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
<b>General Data</b>			
Dimensions (W / H / D) in mm	494 / 389 / 196	494 / 389 / 196	494 / 389 / 196
Weight	24 kg	25 kg	25 kg
Ambient Temperature	-25 °C – +60 °C	-25 °C – +60 °C	-25 °C – +60 °C
Working Allitude	< 2000 m	< 2000 m	< 2000 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	Free Convection	Free Convection	Free Convection
IP Degree of Protection	IP65	IP65	IP65
DC Connections	MC4	MC4	MC4
AC Connections	Plug connector	Plug connector	Plug connector
Graphics Display	Yes	Yes	Yes
Optional Interfaces	RS485 / Bluetooth / Wifi	RS485 / Bluetooth / Wifi	RS485 / Bluetooth / Wifi
Standard Warranty	5 years	5 years	5 years
<b>Certificates</b>			
	CE / VDE / G83 / CEIO-21	CE / VDE / G59 / CEIO-21	CE / VDE / G59 / CEIO-21



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## SOLARTEC D 2500 / 3600 / 4600

The Solartec D 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. All the range comes complete with an integrated DC switch.

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 550 V.

Its graphic LCD display facilitates easy operation. It has waterproof direct plug-in terminals and overvoltage, overcurrent and ground fault detection. The units also have functions that detect islanding, short circuit, overloading, leakage current, reverse polarity and overheating. Its IP65 protection degree will ensure that it runs well in tough environments.

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.

## >> Specifications

Input Data	Solartec D 2500	Solartec D 3600	Solartec D 4600
Max. DC Power	2700 W	3800 W	4800 W
Max. DC Voltage	580 V	580 V	580 V
System Start-up Voltage	150 V	150 V	150 V
Full Load Voltage Range / MPPT	200 V – 480 V	200 V – 480 V	250 V – 480 V
Shutdown Voltage	70 V	70 V	70 V
Max. Input Current	10 A	10 A / 10 A	15 A / 15 A
Max. Input Short Circuit Current	15V	15V	20V
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	2500 W	3600 W	4600 W
Max. AC Power	2500 W	3600 W	4600 W
Max. Output Current	12.5 A	16 A	23 A
Output Short Circuit Current	20 A	20 A	30 A
THD of AC Current	< 3 %	< 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	97.5 %	97.5 %	97.50 %
Euro Efficiency	97 %	97 %	97.0 %
MPP Efficiency	> 99.5 %	> 99.5 %	> 99.5 %
Device Protection			
Reverse Polarity Protection	Yes	Yes	Yes
DC-Switch	Optional	Optional	Optional
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	24 kg	24 kg	25 kg
Ambient Temperature	- 25 °C ~ + 60 °C	- 25 °C ~ + 60 °C	- 25 °C ~ + 60 °C
Working Altitude	< 2000 m	< 2000 m	< 2000 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	Free Convection	Free Convection	Free Convection
IP Degree of Protection	IP65	IP65	IP65
DC Connections	MC4	MC4	MC4
AC	Plug connector	Plug connector	Plug connector
Graphics	Yes	Yes	Yes
Standard Interface	RS485 / Bluetooth / Wifi	RS485 / Bluetooth / Wifi	RS485 / Bluetooth / Wifi
Standard	5 years	5 years	5 years
Certificates	CE / VDE0126 / VDE4105 / G83 / CEIO-21		CE / VDE0126 / VDE4105 / G59 / CEIO-21