



ambiCONVERT Solar

Connecting solar panels to different types of inverters and DC grids with optimized power flow control.



Specifications

Version:	LV	HV
Input power nominal:	4,5kW @90V DC	12kW @600V DC
Input power max.:	6kW	20kW
Input voltage range:	60V – 120V DC	120V – 1000V DC
Starting voltage:	50V DC	90V DC
MPPT voltage:	90V DC	600V DC
Input Channels:	1	1
Input current max.:	50A	20A
Output voltage range:	300V – 450V DC	300V – 800V DC
Output current max.:	12A	20A
Max. efficiency:	> 96%	> 98%
Safety and protection:	Rapid discharge DC Bus and DC Output Over current monitoring Reverse polarity protection Temperature monitoring Self-test	
Dimensions:	19" / 3U / 700mm	
Weight:	< 36kg	
Operating temperature:	0 – 40°C	
Installation site:	indoor, no direct sunlight	
Humidity:	5% – 95%, non-condensing	
Max. installation altitude:	2000m	
Storage temperature:	-20 – 60°C	
Standards:	CE, EN61204-3, EN55011, EN60664-1, EN61140	
Communication:	Modbus RTU	CAN
Cooling:	active, built-in fans	
Noise:	@1m, full load, tbd dB(A) @40°C	
Topology:	transformer less	
IP class:	IP20	
Degree of contamination:	2	
Protection class:	1	

Options / Customization

Communication via
Modbus RTU / TCP
Housing with different IP ratings
Different housing types:
19", wall mounted, etc.
Up to two units per housing
External power supply

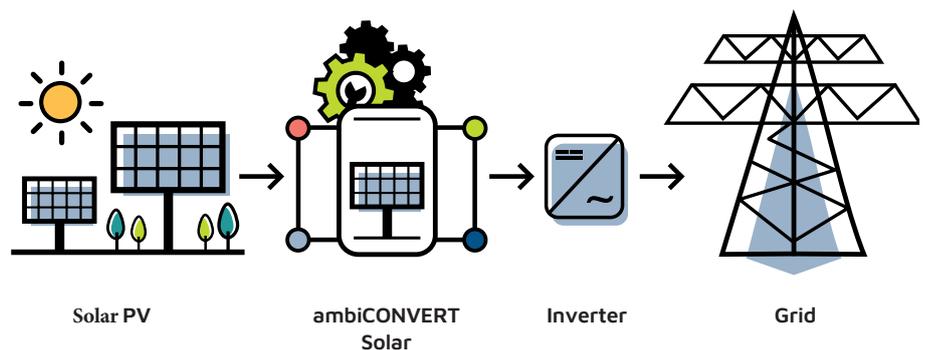
Features

Solar MPPT Tracking
Optimization of different Solar arrays
Wide variety of PV Solar
voltage range
Independent output voltage
Power supply from Solar panels
Software update via communication

With the **ambiCONVERT Solar** different types of solar PV arrays could be connected to a wide variety of standard solar and battery inverters available worldwide or to new kinds of DC grids and off-grid applications. The patented DCDC Flow Technology allows the seamless switching between buck and boost of the solar PV voltages.

In combination with other **ambiCONVERT** and **ambiCHARGE** products your individual energy system could be built.

The **ambiCONVERT Solar** is the universal MPPT DC/DC for different applications.



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All parameters not specially mentioned are measured at 90V DC input, rated load and 20°C ambient temperature. Ripple & noise are measured at 20MHz bandwidth by using a standard probe. This product is considered a component which will be installed into the end product. The end product must be re-confirmed that it still meets the EMC directives. This is a preliminary datasheet. Specifications are subjected to change without notice. The contents of this brochure have been prepared with the greatest possible care. However, no guarantee is given for the correctness, completeness and up-to-dateness of the information and illustrations. We reserve the right to make changes and illustrations may differ. All product names are trademarks and registered trademarks of their respective owners.