



PADCON AMC 2500

The new generation of utility inverter with 2.5 MW nominal output power

Advantages at a glance:

- Maximal PV power: 2.75 MW (Rated power: 2.5 MW)
- DC input voltage from 300 to 1300 V
- Active grid controlling by reactive power compensation and controllable output power
- Fast MPP control
- ADIA interface for high efficiency also at minor load
- Robust construction
- Modular layout
- Automated system diagnosis
- Plug and play principle
- Embedded in a weather proof container (40 feet)

Supported by



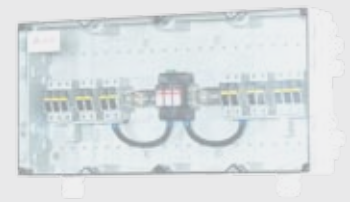
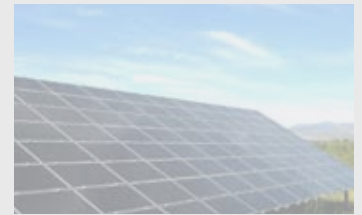
Large-scale inverter system

The PADCON AMC 2500 constitutes the next step in central inverter technology. Having two performance blocks of 1,250 kW AC power output each and an integrated ADIA interface, the inverter masters all irradiation situations with flying colours. It has been especially designed for power plant operation and provides for high performance, reliability, and ease of operation. All system components are tested for resistance and resilience in order to meet the high demands of the conventional large-scale power plant technology.

The PADCON AMC 2500 is equipped with a computer-assisted controller that can be operated easily, informs on the status of critical system components, and implements an automated system diagnosis, if required. The central inverter can be mounted and commissioned in an uncomplicated and quick manner, as secure plug-in contacts are used on both the DC voltage and the AC voltage side.

Technical data

Input stage	Recommended PV generator capacity	2,750 kWp
	PV generator voltage range, MPP (full load / standard PV behavior)	450 - 1,150 V _{DC}
	PV generator range, MPP (partial load)	300 - 1,300 V _{DC}
	Max. input voltage (U _{DC max})	1.300 V
	Max. input current (I _{pv,max})	20 x 305 A
	DC-ripple (U _{ss})	< 1%
	DC overvoltage protection	Yes
Output stage	Nominal output power (P _{AC,nom})	2,500 kW
	Nominal output current (I _{AC,nom})	72 A per phase
	Output voltage (U _{AC})	20 kV ±10 %
	System frequency (f _{AC})	49.5 Hz – 50.5 Hz (optional 60 Hz)
	Power factor (cosφ)	1
	AC overvoltage protection	Yes
	AC distortion factor	< 1%
Power consumption	In-use power consumption	< 1% P _{AC} , nominal
	Stand-by power consumption	< 700 W
	Auxiliary power supply	not required
Features	Outside colour	RAL 1015
	Ground leakage protection	Yes
	Heating system	Yes
	Emergency stop switch	Yes
	Circuit breaker AC side	Load break switch
	Circuit breaker DC side	Fuses & switch
	Overload protection AC	Yes, monitorized
Standards	Overload protection DC	Yes, monitorized
	EMV	EN 61000-6-2, EN 61000-6-4
	Grid monitoring	accordant to VDEW regulations
	CE conformity	Yes
	Protection class conforming to DIN EN 60529	IP 54
Environmental conditions	Temperature range	- 20°C to +50°C
	Rel. humidity (non dew)	15 to 95 %
	Maximum height over Mean Sea Level	1000 m
Dimensions & weight	Dimensions (LxWxH in mm) ±3%	12,192 x 2,438 x 2,591 mm ³
	Weight	28 t
Miscellaneous	MTBF (with regular maintenance every 24 months)	100,000 h (equivalent to 20 years of operation)
	Communication interfaces	Ethernet, GSM
	Extended warranty	24 months
	Extended warranty (optional)	5, 10, 20 years



Top view



Side view

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