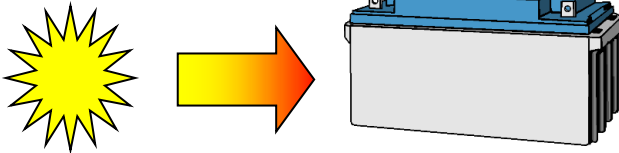


PV-Inverters

AX II model series M

4 / 5kVA multifunctional inverter
Power factor 1 / MPPT solar charge controller



Optimized for PV energy storage

NEU / NEW: PF 1.0



Special features of the model series M:

- NEW: Power factor 1**
- NEW: Larger LC-Display**
- NEW: Equalizing for optimized battery performance and life**
- NEW: Integrated star point grounding according to VDE AR-E 2510-2**

Built in MPPT solar charge controller

Ideal for achieving the maximum performance of PV modules

Properties of the AX-series

- PV inverters without mains supply
- Island operation possible
- 4000, 5000W rated power
- 24, 48VDC battery voltage
- PV / battery charger with 3-stage charge
- Battery voltage thresholds individually adjustable
- No external star point replication necessary
- To be preferred for PV module outputs > 500W
- Suitable for higher yields through MPPT
- Multiple power sources: solar power, mains supply, battery
- Parallel operation of up to 9 inverters possible*
- 3-phase operation possible
- Sinewave output
- Configurable via LCD display or PC software
- Automatic restart on power return
- Overload / over temperature / short circuit protection
- 24 months warranty

Pictures above: Front view
Left: AX-M 4000/5000 48V,
Right: AX-M 4000 24V

Right: Connection side
Upper: AX-M 4000/5000 48V,
Lower: AX-M 4000 24V



Description:

The devices of the AX K series with built-in PWM Solar charge controllers are multifunctional inverter / PV chargers with the combined functions of an inverter, and solar and battery charger.

These inverters are suitable for off-grid isolated operation via PV modules, but can also be powered by accumulators, generators or the public power grid. If there is insufficient power supply from the PV modules, the device automatically replenishes with battery power or switches to the power grid when the batteries are dead. Three AX inverters in combination can be configured for three-phase operation.

* For higher power requirements, optionally up to 9 units with a total output of 45kW maximum can be connected in parallel.



All important status information as well as current performance and power generation data is displayed in an illuminated LCD display.

With the Monitoring Box (Wi-Fi Box), the power generation data can be retrieved via WLAN from the PC, smartphone or tablet PC in the web browser.

Specifications

Specifications (AX II Model series M)

Model AX-II:	M 4000-48	M 5000-24	M 5000-48
Rated power VA	4000VA	5000VA	5000VA
Rated power W	4000W	5000W	5000W
AC Input			
AC input voltage range	230VAC		
AC input frequency	100 – 270VAC		
AC input voltage	50Hz / 60Hz		
Output			
Output voltage	230VAC ± 5 %		
Max. power (5 seconds)	8000VA	10000VA	10000VA
Max. efficiency	95%		
Output frequency	50Hz or 60Hz, selectable		
Transfer time	20 ms configuration „general home applications“ 10 ms configuration „Computer applications“ (UPS)		
Wave form	Sine wave		
Battery			
Battery voltage	48VDC	24VDC	48VDC
Charging voltage	48.0 – 58.4VDC	24.0 – 29.2VDC	48.0 – 58.4VDC
Overload protection	60VDC	30VDC	60VDC
Solar-/AC-charger			
Max. PV-power	4000W	2000W	4000W
PV-charging current	80A		
Max. AC charging current (adjustable)	60A		
Max. charging current (adjustable)	140A		
Effective operating range U _{op}	60- 115VDC	30 – 115VDC	60 – 115VDC
Max. input voltage U _{ocv}	145VDC		
Standby power consumption	2W		
General data			
Dimensions (HxWxD) [mm]	468 x 297 x 125	475 x 310 x 180	468 x 297 x 125
Weight (in kg)	12.5	12.5	13.5
Humidity	5% up to 95% (non condensing)		
Operating temperature	0°C - 50°C		
Storage temperature	-15°C - 60°C		
Protection	IP 20		
Regulations / standards	Safety	EN 62109-1: 2010, EN 62109-2: 2011	
	EMC	EN 55032: 2015, EN 55024: 2010+A1: 2015, class A	
	Certifications	CE	