

Multifunction inverter

AX-K1

NEW

The devices in the AX K1 series with integrated MPPT solar charge controller are multi-function inverters / PV chargers with the combined functions of an inverter as well as a solar and battery charging device. These inverters are suitable for standalone operation independent of mains supply via PV modules but can also be operated with electrical power from accumulators, generators or the public power supply grid. If insufficient power is being supplied from the PV modules, the device automatically tops up the power level with battery current or, if the batteries are discharged completely, it switches over to the mains power grid. A network of three AX units can be configured for 3-phase operation.



Details



View of the underside AX-P1 AX-K1



Monitoring Box (WiFi Box)

With the monitoring box (WiFi box), the power generation data can be called up via WLAN from a PC, smartphone or tablet PC in the web browser.

Characteristics

- PV inverter without mains power supply
- Island operation possible
- Installed PWM solar charge controller
- 1000, 2000, 3000, 4000, 5000 W nominal load
- 12, 24, 48 VDC Battery voltage
- PV- / Battery charger with 3-stage charge
- Battery voltage thresholds can be adjusted individually
- No more external neutral-point emulation is required
- Parallel operation by up to 9 inverters
- Several power sources
- 3-phase operation is possible
- Sine-wave output
- Can be configured via LCD display or PC software
- Automatic reboot when mains power is restored
- Protection against excessive loads and temperatures as well as short circuits
- 24 months' warranty

Special features

- Power factor 1
- Larger LC display
- Equalizing (battery)
- Integrated neutral-point emulation (VDE AR-E 2510-2)

Specifications

AX-K1		1000-12	2000-24	3000-24	4000-48	5000-48
Power	Power in VA	1000	2000	3000	4000	5000
	Power in W	1000	2000	3000	4000	5000
AC input	AC input voltage	230 VAC				
	AC input voltage range	100 – 270 VAC				
	AC input frequency	50 Hz / 60 Hz				
Output	Output voltage	230 VAC ± 5 %				
	Peak performance (5 seconds)	2000 VA	4000 VA	6000 VA	8000 VA	10000 VA
	Max. efficiency	95 %				
	Output frequency	50 Hz or 60 Hz, adjustable				
	Transfer time	20 ms configuration Domestic appliances / 10 ms bei Computer applications (UPS)				
Battery	Wave form	Sine wave				
	Battery voltage	12 VDC	24 VDC		48 VDC	
	Charging voltage (VDC)	12,0 - 14,6	24,0 - 29,2		48,0 - 58,4	
	Overload protection (VDC)	15,5	31,0		60,0	
Solar charger / AC charger	Max. PV power	600 W	1200 W		2400 W	
	PV charging current	50 A				
	Max. AC charging current (adjustable)	20 A	30 A		60 A	
	Max. charging current (adjustable)	50 A			110 A	
	Effective operating range U _{OP}	15-18 VDC	30-32 VDC		60-72 VDC	
	Max. input voltage U _{OCV}	50 VDC	60 VDC		105 VDC	
General data	Standby power consumption	1 W	2 W			
	Size (HxWxD) [mm]	316 x 240 x 95	355 x 272 x 100		468 x 297 x 125	
	Weight (in kg)	5,0	6,4	6,9	9,8	9,8
	Humidity	5%-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 61000-6-4: 2007+A1: 2011; EN 61000-6-2: 2005+AC: 2005				
	Certifications	CE				