SOLAR INVERTOR and SOLAR KITS FOR OFF-GRID STAND-ALONE OPERATION



3000 W PV Inverter Made in EU

The 300 W PV Series invertor is an off-grid Photovoltaik invertor, which obtains its power from three sources of electricity: photovoltaic modules, rechargeable batteries or an AC power source. It can be both a source of AC power generator and the utility grid.

At insufficient power supply from the PV modules the unit completes the missing power requirements automatically with the help of batteries. At night or in complete failure of PV modules, the inverter will automatically switch to the AC power source.



Above: All the important data of your PV system can be monitored via the extensive display.

Features

- DSP and microprocessor with redundant controller ensure maximum reliability
- · Pure sine wave output
- Multiple power sources: solar power, AC power supply, 48VDC battery
- · Built-in MPPT tracker
- Electrical isolation between the inverter and battery guarantee for increased safety
- Smart LCD display with a display memory (tracking of up to 15 years in power generation)
- Multiple communication interfaces for remote monitoring
- · Incl. monitoring and configuration software
- RS-232 / USB as standard (optional Modbus, SNMP, GPRS, AS400 dry contacts)
- · Adjustable charge current up to 25A
- · High efficiency:
- · Solar Panel > AC output up to 95.5%
- · Battery > AC output up to 92%

Solar inverter

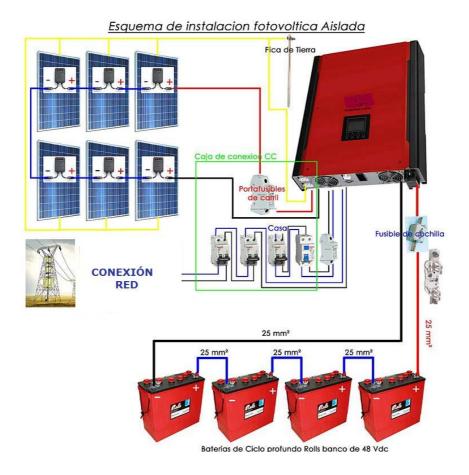


It comes with a multilingual extensive setup and monitoring software for reliable and transparent setup, as well as evaluation of your PV system. All the important operating parameters can be set via this program.

Specifications ifications

Model		Series 3kW
Nominal power		3000W
PV-input (DC)	Maximum DC-voltage	500VDC
	MPP voltage range at full load	250VDC ~ 450VDC
	PV-voltage range	100VDC ~ 500VDC
	Maximum PV-current	13A
AC-input	Nominal AC voltage	230VAC
	AC-grid frequency range	47.5 ~ 52.5Hz
	Permitted voltage range	175 - 280VAC
	Maximmum input current	20A
AC-output	Nominal AC voltage	230VAC
	Voltage range	175 - 280VAC
	Nominal output current	13A
	Power factor	>0.99
	THDv (voltage)	<3% (linear load)
AC- output in battery mode	Output voltage	230VAC
	Output frequency	50Hz
	Output wave form	sinusoidal
	Efficiency (DC-AC)	92%
	Overload	110% for 1 min. / 150% for 30 sec. / immediate shutdown at 200%
Batteries and charger	Nominal DC voltage	48VDC
	Maximum charging current	25A
Model		
Dimensions/weight	Dimensions (H x W x D in mm)	170 x 415 x 420
	Netto weight (kg)	15.5
	Protection class	IP 20
Communication	Interfaces	RS232 / USB
	Slot for expansion cards	Optional card available: SNMP, GPRS, AS400, Modbus
Environment	Humidity	0 ~ 90% RH (non-condensing)
	Operation temperature	0°C ~ +40°C
	Installation altitude	0 ~ 1000m*
Tests / standards	Safety	EN 60950-1
	EMC	EN 61000-6-2, EN 61000-6-4
	Tests	ĆE

Power derating 1% per 100m altitude, if more than 1,000 meters



KIT Components n.1:

- Modules 235 Wp or 230 Wp, 5 Units
- 1 Invertor / Charger made in EU (3000/48),
- 4 Batteries Rolls 30HT-125 (166 Ah/48V) (3984Wh Storage)
- 1 Structure for Roof, optional

KIT Components n.2:

- Modules 235 Wp or 230 Wp, 10 Units
- 1 Invertor / Charger made in EU (3000/48),
- 8 Batteries Rolls 30HT-125 (166 Ah/48V) (3984Wh Storage)
- 1 Structure for Roof, optional

Ferven reserves the right to amend without previous notice the composition and characteristics of its kits