

# Rack Smart Sinus Inverter R30i / 3000VA / 2100W

- Pure Sine wave output
- Smart Technology
- High quality device
- Long life with reparation
- 3 year warranty



### **DESCRIPTION:**

• The device is used for powering various equipment in transformer stations, it is powered by DC voltage 110Vdc nominally, it generates sine voltage 230Vac at its output.

- It does not have a battery charger.
- Galvanic separation between AC and DC power supply.

• The device has two operating modes that the user selects within the service menu, based on their needs:

• On-Line: the inverter at the output generates all the time a sinusoidal voltage of 230V~ which is at the same time synchronized to the mains voltage, powered all the time from the dc supply and in the event of a blackout of the mains voltage at the output, there is no break towards consumers.

• Off-Line: the device forwards, filters and stabilizes the mains voltage in the range  $175V \sim -265V \sim$  the tolerance of the output voltage is about + - 10% when the mains voltage fails or it is the same outside the aforementioned limits, the Sine voltage generated by the device appears at the output, maximum pause up to 5mS.

• If the equipment powered by the Inverter can tolerate a voltage of + / -10% and a pause of up to 5mS, it is recommended to use the Off-line operating mode in the first place, because in this way the Rectifier that powers the Inverter is not burdened and the lifetime of the Inverter is extended.

• When connecting DC voltage to the input of the inverter, there is no spark and it has protection against the reverse polarity of the batteries, if the wrong polarity is connected - there are no consequences, the device will not work.

• The service menu allows setting various parameters such as:

- Lo-bat: the lower voltage level up to which the inverter will work is set.

- Protection against too high input DC voltage, the upper voltage level up to which it will be adjusted inverter work.

- Setting the lower and upper level of DC restart

- Setting the lower and upper level of the output AC voltage at which the alarm will be activated.

- Selection of Inverter operating mode: On line / Off line.

• A large number of quality protections against: Overload, Short circuit, Overheating, Reverse battery polarity, Too high or too low DC voltage at the Inverter input, Too high or too low AC voltage at the input and output of the Inverter, disturbances at the input or output of the Inverter.

• In case of malfunction or short-term shock overload, the device transfers to the mains voltage via automatic By-pass, with a maximum pause of up to 5mS.

## **TECHNICAL DATA:**

MODEL:	R30i
Power:	3000VA/ max 2100W
INPUT:	
Nominal Voltage:	230V VAC (from 180V~ to 265V~ without de- grading power)
Frequency:	50Hz +/- 8 %
OUTPUT:	
Nominal Voltage:	230V +/- 2 %
Voltage distortion:	<3%
Wave form:	Pure Sine wave
Frequency:	50Hz +/- 0,01%
Transfer time:	0 msec
By-pass:	Yes
Efficiency:	> 87%
Topology:	On line / Off line
PROTECTION:	
Protections:	Short circuit at the output / Overload / Overcharge batteries / Deep batteries discharge / Overvoltage-Undervoltage on the Input / Overvoltage-Undervoltage on the Output / Overheating
INDICATOR:	
Front panel:	Alpha-numeric display for show: - input / output voltage, input / output frequency, battery voltage, output power, battery work time, UPS status, number of mains voltage outages, AC output current. -enable/disable buttons , settings
BATTERIES:	
Battery number and model:	110V nominal (Range: 85V – 160V)
Soft-start (batt.circuit):	YES
Settings:	Minimum output AC voltage below which an alarm occurs / Maximum output AC voltage above which an alarm occurs / Minimum input DC voltage below which the inverter turns off / Maximum input DC voltage above which the inverter turns off / Input DC voltage restarts from the maximum side / Input DC restart voltage from the minimum side / Selection of On-line or Off-line operating mode
Communication:	Overload / Dc voltage out of range

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SAFETY STANDARDS:		
LVD confirmity :	EN 60950	
EMC confirmity:	EN 62040-2:2006	
DIMENSIONS:		
Height:	17 cm	
Widht:	44 cm	
Depth:	67 cm	
GENERAL:		
Dielectric strength:	5000V DC Input / Output ; 5000V DC Input / ground; 2500V DC Input / ground	
Crest factor:	3	
Operating temperature range:	-20°C to +50°C	
IP class:	IP 21	
Safety mark:	CE	
Weight:	35 kg	
WARRANTY:		
Warranty:	3 years	

## Rear side R30i:







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