

WARRANTY CARD

DATE OF PURCHASE	
SHIPPING ADDRESS	
SIGNATURE / STAMP	
DAMAGE DESCRIPTION	
SERVICE COMMENTS	

FILL IN IF NEEDED  
(\*) Cross incorrect  
I agree to pay the cost of inverter repair due to:  
\* expiration of the warranty period / \* warranty void

Before proceeding with the repair, service will inform by phone about the exact costs of the repair.  
Please attach a copy of the purchase document (receipt or invoice) to the complaint.  
The full regulations of service repairs can be found on our website [www.voltpolska.pl](http://www.voltpolska.pl)



PRODUCT MANUAL

PURE SINE WAVE ELECTRONIC INVERTERS  
WITH UPS

sinusPRO E



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# INTRODUCTION

Thank you for purchasing UPS from sinusPRO E series. Please read this user manual before starting the device.

## Inverter characteristics

- One device with built-in DC / AC converter, an uninterruptible power supply unit and an automatic battery charger
- Toroidal transformer used in the converter ensures high efficiency and low idling current. The device is much more energy-efficient than older constructions that used E-type transformers
- Fast 32-bit microprocessor ensures accurate and trouble-free operation
- Intuitive and simple operation thanks to the color LED display, which informs about the current operating status of the device (input and output voltage, battery capacity, charging, etc.)
- Converter generates a pure sinusoidal voltage at the output, which makes it possible to work with practically any type of load
- High battery charging current (exact values in the table with technical specifications)
- Possibility of changing charge current and switching off charger
- Fast switching from mains supply to operating mode as a UPS enables uninterrupted operation of connected devices
- Intelligent control of the cooling fan, depending on the actual temperature of the device and the operating status of the inverter
- AC priority switch (network) / SOLAR (battery) (on some models)

# FIRST TIME START-UP

## STARTING-UP INVERTER

1. Open the carton and check that all components are included and the device is undamaged. Disconnect mains cable from the device.
2. Connect battery properly to the device according to the correct polarity (red wire + / black wire -).
3. Start the device with the ON / OFF button (hold down 5s until you hear a beep) and connect the plug to the mains socket.
4. Change the mains charger switch to the "I" position to start charging the battery and select AC PRIORITY.
5. Connect all devices that you want to use with the power supply, make sure they are turned off and turn them on one by one after connecting.
6. On models with built-in priority switch, after connecting the regulator, select the SOLAR PRIORITY option.


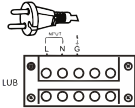

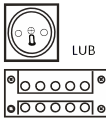
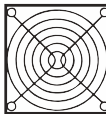

## SWITCHING-OFF THE INVERTER

1. Turn off one by one, all the devices connected to the inverter.
2. Change the charger switch to the "0" position to stop the battery charging process.
3. Hold down the ON / OFF button for 3 seconds to disconnect the inverter output.
4. Disconnect mains plug from the network.
5. Disconnect battery from the inverter.

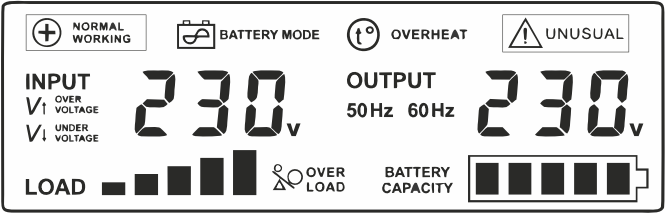
## ATTENTION

1. Be careful when connecting the battery, the voltage generated when reverse polarity happen can damage the inverter.
2. Do not overload the device above its nominal power. When connecting refrigerators, freezers and other induction appliances / consuming more power on start-up, remember not to exceed 30% of the total power rating of the UPS.
3. Do not connect the device on the outdoors, avoid contact with water.
4. Remember to install the power supply in the right place, with access to fresh air and a minimum distance of 30 cm from each side of the housing.
5. If you notice an incorrect operation / damage to the inverter, contact the manufacturer's service department.
6. If you want to test the device please do not unplug inverter from the mains. Instead turn off mains RCD switch in building to observe proper work of the device. By unplugging inverter from the mains, neutral - "zero" is cut off from the inverter, which can cause incorrect work of the inverter.

# OPERATION OF THE DEVICE

NAME	PICTURE	DESCRIPTION
Output switch		Pressing and holding the switch for more than 3 seconds will change the state of the inverter to ON or OFF.
AC input cord or terminal		Connecting the plug to an electrical outlet allows the battery to be charged and to power the output devices through the built-in voltage regulator.
Mains switch		If the device is connected to the mains supply and the switch is in the "I" position, the battery will be charged and the output devices will be supplied from the mains. Switching to the "0" position will start the inverter and supply the output devices from the battery.
Output socket or terminal		Connect output devices to the terminal or terminal strip. The maximum power of a single socket is 2000 W. If the power of the output devices is higher, please connect them to the terminal block.
Ventilation fan		The cooling fan starts when the UPS inverter is running or when the battery is being charged - when the temperature of the transistors exceeds 45 C
Battery input		The red terminal should be connected to the positive pole of the battery (+), and black to negative (-). Changing the cables will prevent proper operation of the device.

# LCD DISPLAY ELEMENTS



- Normal operation mode, devices powered directly from the 230 V BYPASS network



- No mains voltage, output devices powered from a connected battery



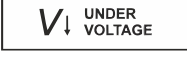
- Overheating of the inverter, emergency output devices are disconnected



- Incorrect battery voltage, short-circuit or overheating of MOSFET transformers



- Mains voltage is too high



- Mains voltage is too low



- Inverter overload, too high power output devices



- Inverter load level



- battery charge level, this indicator will flash during charging



- Input voltage value



- Output voltage value and frequency

# TECHNICAL PARAMETERS

# WARRANTY SERVICE COMMENTS

Model		500 E	800 E	1000 E	1500 E	3000 E
Max power		500 VA	800 VA	1000 VA	1500 VA	3000 VA
Max constant power		300 W	500 W	700 W	1050 W	2100 W
Idle current (battery mode)		< 1 A	< 1 A	< 1 A	< 1 A	< 1 A
Input	Voltage	140 ~ 275 VAC				
	Frequency	45 ~ 65 Hz				
	AVR stabilizator	In network mode, the AVR stabilizer can increase or decrease the AC input voltage to the right level. If a voltage exceeding the range appears on the AC input (203 VAC +-1% - 239 VAC +- 1%) output voltage will be about ~ 213 VAC +-1% and will grew adequately to the value of the input voltage				
Output	Voltage	230 VAC ± 1% in battery mode; 230 VAC ± 8% in AC mode with AVR				
	Frequency	50 Hz ± 0.5 Hz				
	Voltage type	PURE SINE WAVE				
	Distorions	< 3%				
Priority selection button (AC / battery)		YES <small>(only in E PLUS version)</small>	NO	YES	YES	NO
Charge current selection (5/10A)		YES <small>(E PLUS: 2/5/10A)</small>	YES	YES	NO	NO
Securities		overload, temperature, over and undervoltage, before the battery is discharged, short-circuiting, before overcharging				
Switching time AC / BATTERY		≤ 4ms				
Battery voltage		12V DC				24V DC
Max. charge current [A]		10			20	10
Dimensions [W x L x H] [mm]		230 x 145 x 180		350 x 150 x 190	355 x 220 x 250	355 x 220 x 250
Weight		5,1 kg	6,5 kg	7,1 kg	10,7 kg	16,4 kg