

PURE SINE WAVE ELECTRONIC CONVERTERS WITH UPS FUNCTION

sinusPRO W

DEVICE CHARACTERISTICS

- Functions of **DC/AC converter, UPS, automatic batteries charger** and **SOLAR / MAINS work priority switch** contained in one device.
- Thanks to the possibility of changing the operating mode and the built-in protections, the sinusPRO W series converters can operate in systems in which the battery is charged from photovoltaic panels through an additional solar controller connected to the battery.
- Toroidal transformer used in the converter provides **high efficiency** and **low idle current**. The device is **much more energy-efficient** than older constructions.
- Fast 32-bit microprocessor ensures **accurate and failure-free operation**.
- Intuitive and simple operation thanks to the **color LED display**, which informs about the current device operating status (input and output voltage, battery status, charging, etc.).
- **The converter generates a pure sinusoidal voltage at the output**, which makes it possible to work with virtually any type of load.
- Fast switching from AC supply to UPS operating mode enables **uninterrupted operation of connected devices**.
- **Intelligent cooling fan control**, depending on the actual temperature of the device and inverter operating status.

TURNING ON CONVERTER

- Open the box and check that all components are included and the device is undamaged. Disconnect power supply cable from the device.
- Connect battery correctly to the device according to the correct polarity (red wire + / black wire -).
- Turn on the device with the ON / OFF button (press and hold the button for 5s until you hear a beep) and connect the plug to the AC socket.
- Set the AC charger switch to the "I" position to start charging the battery.
- **[OPTIONAL]** Connect a set of solar panels to the solar controller, then connect the output from the regulator to the battery maintaining the correct polarity of the connection.
- Select desired working mode using the AC / SOLAR priority selection button.
- Connect all devices that you want to use with the power supply, make sure they are turned off and after connecting, turn them on one by one.

TURNING OFF CONVERTER

- One by one turn off devices connected to the converter.
- Set the AC charger switch to the "0" position to stop the battery charging process.
- Press and hold ON / OFF button for 3 seconds to disconnect converter output.
- Disconnect power supply cable.
- **[OPTIONAL]** Disconnect the solar controller from the battery.
- Disconnect the battery from the converter.

CAUTIONS

- Be careful while connecting the battery, voltage generated with reverted polarity can damage the converter.
- 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.
- Do not connect the device outdoors, avoid contact of the UPS with water.

- Remember to place the power supply in the correct place, with access to fresh air and a minimum distance of 30 cm from each side of the housing.
- If you notice an incorrect operation / damage to the converter, contact the manufacturer's service.
- Verify if the device is working correctly after connecting all connected appliances, turning off the AC Voltage using the fuse breaker, do not disconnect plug from the AC socket, because this way you would disconnect the fixed zero taken from the mains.
- The battery charger built into the sinusPRO E series converters operates on the principle of buffer charging. **We recommend using batteries adapted for buffer charging and deep discharge, for example: dedicated AGM VPRO, gel, acid closed DEEP CYCLE etc.** Connection car battery to the converter (acid starter) that is not adapted to such operation may result in incorrect converter operation and / or damage to the battery.
- The AC output of the converter is used for direct supply of connected devices in the so-called island system. It is forbidden to connect the AC output to the existing electrical installation (even through a residual-current protection), and in particular to phase, neutral N and differential-current wires. **Such connection may result in reverse voltage applied to the converter output. Damage caused by such connection results in the loss of the warranty!!!**
- Other important information related to for example: batteries selection, required power calculation or battery pack capacity calculation can be found on our website www.voltpolska.pl

Model	500W	800W	1000W	2000W	2500W	5000W
Total power	500VA	800VA	1000VA	200VA	2500VA	5000VA
Nominal power	300W	500W	700W	1400W	1800W	3400W
Idle current (battery operation)	<1A	<1A	<1A	<1A	<1A	<1A
Input	Voltage	140 ~ 275VAC				
	Frequency	45 ~ 65Hz				
Output	Voltage	230V AC ± 1% in battery mode; 230V AC ± 8% in AC supply mode with AVR				
	Frequency	50Hz ± 0.5Hz				
	Voltage waveform	Pure sinusoidal wave				
	Distortions	<3%				
Priority selection button (mains / battery)	YES					
Protection	Overload, temperature, over- and under-voltage, against battery discharging, short circuit, against overcharging					
Switching time (mains/battery)	≤4ms					
Battery voltage	12V DC			24V DC		48V DC
Charging current [A]	10		20		10	
Dimensions [width x depth x height] [mm]	260 x 150 x 230		310 x 170 x 330			540 x 330 x 130
Weight	7.3kg	7.9kg	9.3kg	13.5kg	15.3kg	30kg