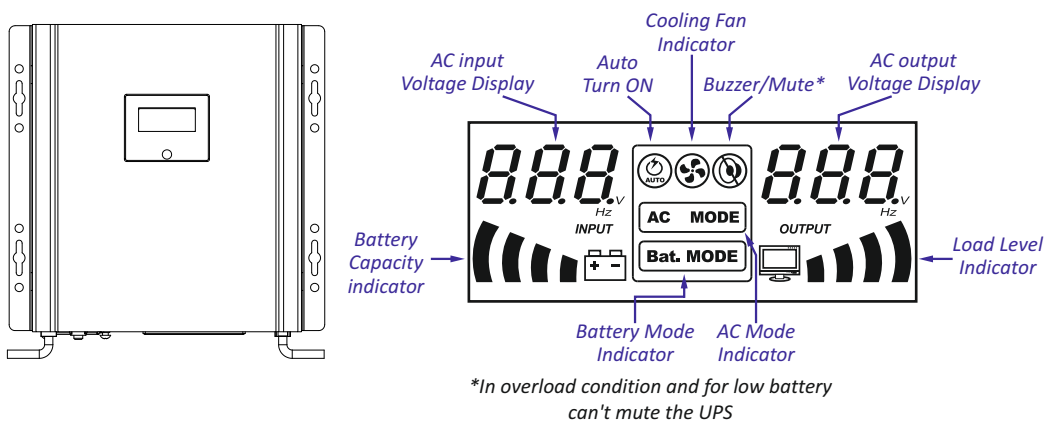


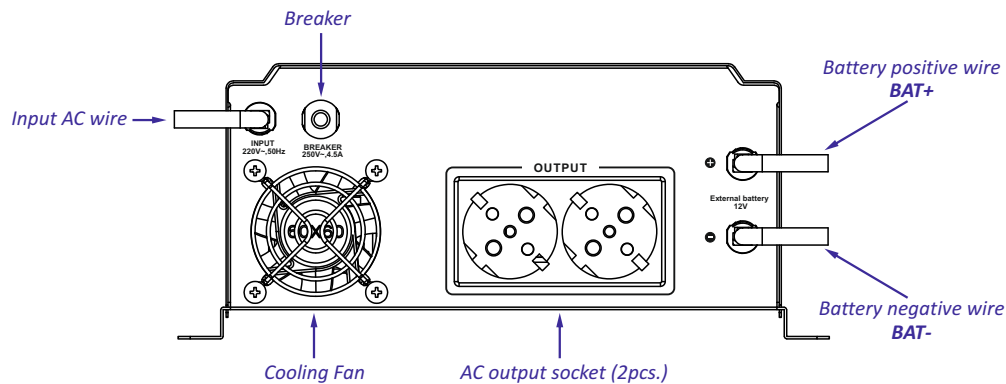
6. SPECIFICATION

Model	CO-SinusUPS-400W-WM
Output Power	500VA / 400W
Input Voltage / Frequency	147 ÷ 275VAC ± 5VAC; 47 ÷ 65Hz
Output Voltage Range (AC mode)	190 ÷ 255VAC ± 5VAC
Output Voltage and Frequency (Battery mode)	210 ÷ 235VAC / 50Hz
Transfer Time	max. 10ms
Battery Voltage	12VDC
Charging Current	max. 5A
Output Waveform (Battery mode)	Pure Sine Wave
Operation Temperature and Humidity	0 ÷ 40°C, 10 ÷ 90%
Dimensions	260 x 267 x 113mm
Net Weight	5.8kg

7. FRONT PANEL



8. BACK VIEW



4

PURE SINE WAVE INVERTER UPS



MODEL: **CO-SinusUPS-400W-WM**

APPLICATIONS: CENTRAL heating and hot water systems, off-grid solar systems, home electronics, WI-FI, yachts, campers, etc.

USER MANUAL

Please read and save this manual!

This manual is an important instruction that you should follow during installation and maintenance of the inverter. Please read all instructions before using the equipment and save this document for future reference.

1. INSTALLATION

- Put the UPS in ventilated area, kept it away from water, combustible and corrosive gas. Keep UPS upright and all the vent holes on panels opened.
- If transfer the UPS from hot space to cold space, condensation of water drop will happen, please ensure the UPS is totally dry, otherwise it will cause short circuit and damage the UPS. Please put the UPS near to the utility power input sockets, in order to cut off the utility power in emergency situation. Please turn off the load equipment before connecting to UPS, then turn on the equipment from sequence with big load to small load.
- Connect UPS to the special socket with current protection. When connecting load to output socket it should be used earth wire. Voltage is present in output socket even if load is not connected. To turn off output UPS please disconnect UPS from utility power and then turn off the UPS.
- It is suggested to charge batteries 8-12 hours for standard type UPS. Charging process begins automatically when UPS is connected to mains. UPS can be used even without charged battery but the back up time will be less than the standard value.

2. OPERATION

Connect the RED battery cable to the positive terminal (B+) and the BLACK one to the negative terminal (B-) of the battery. Battery cable and polarity must be connected securely. Do not short the positive and negative of the battery terminal or connect reversely. When connecting the battery cable, occurrence of spark is normal phenomenon.

AC Mode

When the UPS is connected to AC press the power switch for 3 seconds, then the UPS is working in the AC Mode. It should be showed the AC input voltage and the UPS output voltage accordingly. The percentage of the battery capacity is indicated on LCD display. When more loads are connected, it shows that the percentage of the load level will be increased correspondingly. When it is overloaded to 100%, indicator continued flickers with long beeps. User should remove the unnecessary load until stopping alarm. To turn off the UPS will please press the OFF switch for 3 seconds. But the UPS is still under charging, if you want to turn off the UPS completely, please disconnect UPS from AC.

Battery Mode

When AC input is disconnected, turn on the UPS by pressing the power switch for 3 seconds, now the UPS is in Battery Mode. The buzzer will beep every 8 seconds. The UPS can be muted by pressing the power switch shortly. When press the switch again, the beep recover. When battery's capacity decreased, it shows that the percentage of battery capacity level will be decreased correspondingly. When the battery is not enough, indicator continued flickers with beeps every second. User should save the documents then turn off the UPS, or connect the UPS to AC. To turn off the UPS will please press the OFF switch for 3 seconds

Autocharging

When the UPS is connected to AC, the battery will be charging automatically, and the UPS socket have no output voltage. When battery is not fully charged, battery capacity indicator, shows battery is charging. When battery is full of charge, battery capacity indicator shows 100%.

3. MAINTENANCE

This UPS series only requires minimal maintenance. The battery of standard UPS is sealed, maintenance free type (VRLA), which need charging frequently to remain its expected life. Once it is connected with utility power, whether UPS is ON or OFF, it keeps charging the batteries and also offers overcharging and over discharging protection.

If UPS will not be using over a long period of time, please charge it once every 4 to 6 months.

Under normal conditions, battery's life are 3 to 5 years (depends on battery quality and type of operation). If the battery is found in poor performance, earlier replacement should be made and must be operated by qualified personnel.

Do not replace the battery individually. Whole set of batteries should be replaced following the instructions from battery supplier.

Normally, the batteries should be charged and discharged once every 4 to 6 months. Charging begins automatically after the UPS shut down by discharging, charging time for standard UPS should be at least 12 hours. In the regions of hot climates, the battery should be charged and discharged every 2 months.

4. TROUBLESHOOTING

Problem	Possible Causes	Action to take
The utility power is normal, but the UPS always at battery mode	UPS input breaker disconnection.	Set the breaker connected
Battery discharging time is getting shorter	Battery is not yet be fully charged	Keep UPS connecting to utility power persistently for more than 8 hours to recharge the batteries again
	Excessive loads connected at UPS's outlets	Check the loads and remove the non-critical equipment.
	Battery aged	Replace the batteries. Please contact the the distributor to obtain the parts and replacement service.
The UPS cannot power on after pressing the power switch.	The power switch is pressed too briefly	Press the power switch for more than 3 seconds
	The UPS is not connected to the battery, or turn on the UPS with low battery voltage.	Connect battery to UPS, if the battery voltage is too low, please restart the UPS
	UPS fault	Please contact with the service

5. IMPORTANT SAFETY INSTRUCTIONS

- Before disposing the batteries, remove conductive jewelry such as necklace, wrist watches and rings.
- Please turn off the UPS and cut off the utility power before replacing the batteries.
- Please use the screwdriver with insulated handle. Do not put the tools or other conductive substances on the batteries.
- When connecting the battery cable, occurrence of spark in the joints is normal phenomenon, which harmless for UPS and personal safety.
- Do not short the positive and negative of the battery terminals or joint reversely.
- If it is necessary to replace any connection cables, please purchase the original materials from the authorized distributors or service centers.
- Do not fire batteries or battery packs, they may explode.
- Do not open or mutilate batteries, released electrolyte is highly poisonous and harmful to the skin and eyes.
- Do not short the positive and negative of the battery electrode, it may result in electric shock or fire.

Warning!

Due to the forced air circulation used in UPS, keeping the device clean (including the inside of the device) is the user responsibility. Failure to comply with the above recommendation may result in the loss of warranty rights.