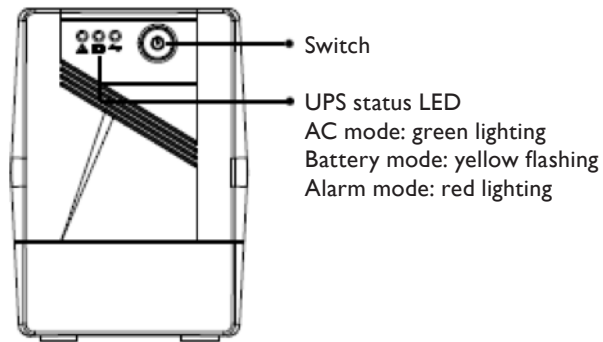


1. PRODUCT INTRODUCTION

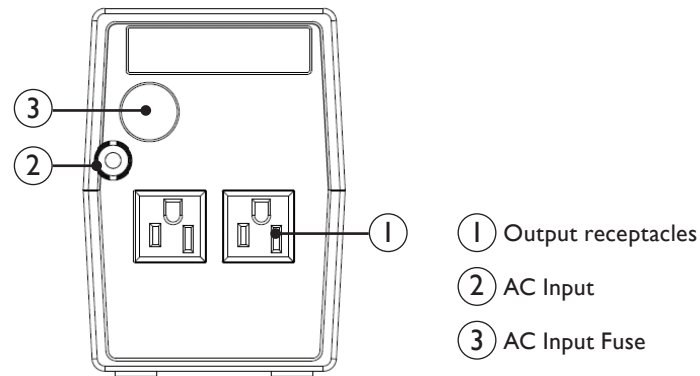
The UPS provides comprehensive protection against surges and spikes and high power density in a small and economic package. The UPS will continue providing power to connected devices during power outages. With built-in voltage stabilizer, it can still remain online operation and provide stable power under fluctuated voltage. Its embedded microprocessor controller guarantees high reliability. It is a perfect choice for any home or small office application.

2. PRODUCT OVERVIEW

Front View:



Rear View:



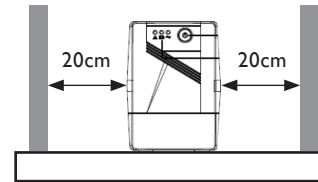
NOTE: Rear view receptacle type may differ from illustration.

3. INSTALLATION & INITIAL STARTUP

NOTE: Before installation, please inspect the unit. Be sure that nothing inside the package is damaged.

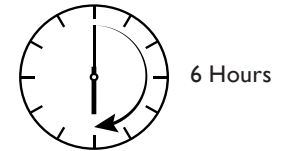
Placement & Storage Conditions

Install the UPS in a protected area that is free of excessive dust and has adequate air flow. Please place the UPS away from other units at least 20 cm to avoid interference. Do NOT operate the UPS where the temperature and humidity is outside the specific limits. (Please check the specs for the limitations.)



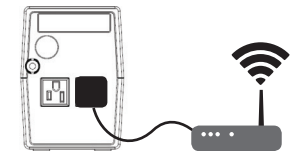
Connect to Power and Charging

Plug in the AC input cord to the wall outlet. For the best results, charge the battery at least 6 hours before initial use. The unit charges its battery while connected to the power.



Connect the Devices

Plug in your modem and wireless router into the receptacles on the rear panel of the UPS. Simply turn on the switch of UPS unit, and the devices connected to the UPS will be protected by UPS unit.



CAUTION: NEVER connect a laser printer or scanner to the UPS unit. This may cause the damage to the unit.



Powering the UPS

Turn on the UPS unit by pressing the switch on the front. Turn off the UPS unit by pressing the switch again.

Cold Start Function

If the UPS is off and not connected to power, it's still possible to cold start the UPS to power connected devices if the battery has sufficient charge.

4. IMPORTANT SAFETY WARNINGS SAVE THESE INSTRUCTIONS

CAUTION! To prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area free of conductive contaminants. (See the specifications for the acceptable temperature and humidity range.)

CAUTION! To reduce the risk of overheating the UPS, do not cover the UPS' cooling vents and avoid exposing the unit to direct sunlight or installing the unit near heat emitting appliances such as space heaters or furnaces.

CAUTION! Do not attach non-computer-related items, such as medical equipment, life-support equipment, microwave ovens, irons, or vacuum cleaners to UPS.

CAUTION! Do not plug the UPS input into its own output.

CAUTION! Do not allow liquids or any foreign object to enter the UPS. Do not place beverages or any other liquid-containing vessels on or near the unit.

CAUTION! In the event of an emergency, press the OFF button and disconnect the power cord from the AC power supply to properly disable the UPS.

CAUTION! Do not attach a power strip or surge suppressor to the UPS.

CAUTION! If the UPS is with metal chassis, for safety purpose, grounding is a must during UPS installation in order to reduce leakage current below 3.5mA.

Attention! Hazardous through electric shock. Also with disconnection of this unit from the mains, hazardous voltage still may be accessible through supply from battery. The battery supply should be therefore disconnected in the plus and minus pole at the quick connectors of the battery when maintenance or service work inside the UPS is necessary.

CAUTION! Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.

CAUTION! When replacing the batteries, use the same number and type of batteries.

CAUTION! Internal battery voltage is 12Vdc. Sealed, lead-acid, 6-cell battery.

CAUTION! Do not dispose of batteries in a fire. The battery may explode. Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes.

CAUTION! Unplug the UPS prior to cleaning and do not use liquid or spray detergent.

CAUTION! A battery can present a risk of electric shock and high short circuit current. The following precaution should be observed before replacing batteries:

- 1) Remove watches, rings, or other metal objects.
- 2) Use tools with insulated handles.
- 3) Wear rubber gloves and boots.
- 4) Do not lay tools or metal parts on top of batteries.
- 5) Disconnect charging source prior to connecting or disconnecting batteries terminal.

5. TROUBLESHOOTING

Problem	Probable Cause	Solution
No LED display on the front panel	Low battery	Charge the UPS at least 6 hours
	Battery fault	Replace the battery with the same type of battery
	The UPS is not turned on	Press the switch again to turn on the UPS
Alarm continuously sounds when the LED's are normal and there is no other apparent issue	The UPS is overloaded	Remove some devices first. Before reconnecting equipment, please verify that the load matches the UPS capability specified in the specs.
When power fails, backup time is short	The UPS is overloaded	Remove some devices
	Battery voltage is too low	Charge the UPS at least 6 hours
	Battery defect. It might be due to high temperature operation environment, or improper operation to battery.	Replace the battery with the same type of battery
LED is flashing, but no apparent issue	Power cord is loose	Reconnect the power cord properly

6. SPECIFICATIONS

Model	650
Capacity	650VA/360W
INPUT	
Voltage	110VAC / 120 VAC
Voltage Range	81-134 VAC / 89-145 VAC
OUTPUT	
Voltage Regulation	±10%
Transfer Time	Typical 2-6 ms, 10 ms max.
Waveform	Simulated Sine Wave
BATTERY	
Type & Number	12V/7AH x 1
Charging Time	6 hours recover to 90% capacity
PHYSICAL	
Dimension (DxWxH mm)	297 x 101 x 142
Net Weight (kgs)	4.2
ENVIRONMENT	
Humidity	0-90 % RH @ 0-40°C (non-condensing)
Noise Level	Less than 40 dB