USER MANUAL

UPS Line Interactive Sine Wave
BX5000

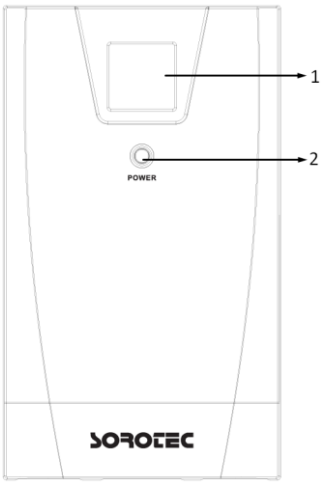


USER MANUAL UPS

⚠ Important Notes – Please Read Before Using:

1. Offline UPS is suitable for use with office desktop computers.
    - If you need to use it with other devices, please contact SOROTEC Technical Support at 📞 **0797-247-888** for advice on the appropriate UPS model.
2. The UPS works best at temperatures between 18°C ~ 25°C.
    - Indoor operating temperature should not exceed 30°C.
3. The UPS does not support grid-tie operation.
    - Do not connect the UPS output to the main electrical grid, as this may cause a short circuit, fire, or explosion, which is extremely dangerous.
4. If you notice any unusual behavior or strange sounds while using the UPS (such as a continuous beeping sound and the UPS shuts down suddenly or within 30 seconds):
    - Please reduce the connected load and try again.
    - If the issue persists, contact SOROTEC Customer Service at 📞 **0903-808-500** for immediate assistance.
5. Do not open the UPS casing while it is still under warranty. SOROTEC will deny warranty service if the warranty seal is broken or the serial label is missing.
6. If the UPS is no longer under warranty, please contact SOROTEC Warranty Support at 📞 **0903-808-500** for guidance on post-warranty services.
7. When replacing the battery, ensure your personal safety by following these steps and having proper electrical/electronic knowledge:
    - Turn off the UPS and disconnect it completely from the power source.
    - Remove any metal jewelry such as rings or watches.
    - Wear insulated gloves and electrically insulated shoes during the procedure.

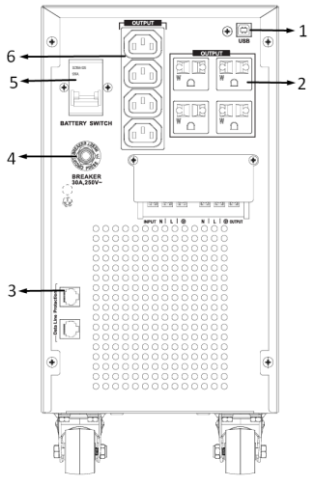
◆ Front Panel:



Legend:

1. LCD display screen
2. UPS power on/off button

◆ Rear Panel:



Legend:

1. RS232/USB communication port with computer (optional attachment)
2. Output power socket for devices (C13 socket type)
3. Network surge protector
4. AC fuse
5. Battery circuit breaker (CB)
6. Output power socket for devices (3-prong socket type)

◆ The LCD screen displays information when the UPS is operating.



Legend:

1. AC input voltage
2. AC output voltage
3. Battery capacity
4. Load
5. UPS operating in battery mode
6. UPS operating in AC mode
7. UPS operating in auto mode
8. Alarm buzzer
9. UPS charging current mode

8. Installation & Usage:

- Installation Location:
  - Place the UPS at least 15cm away from the wall or surrounding objects for proper ventilation.
  - Ensure the operating environment is well-ventilated, free from corrosive chemicals that can damage internal components.
- Usage:
  - Connect the UPS to utility power and charge it continuously for 6 hours before first use.
  - Connect your CPU and monitor (office computer configuration) to the UPS OUTPUT ports.
- Turning UPS On/Off:
  - Without utility power: Press and hold the Power button for 3 seconds to turn on the UPS. Hold 3 seconds again to turn it off.
  - With utility power: The UPS will start automatically once plugged into the wall socket.

⚠ 9. Power Outage Alerts:

- The UPS will beep once every 20 seconds during a power outage.
- When the battery is nearly depleted, it will beep continuously for 30 seconds before shutting down.

10. Protection Features:

- Deep Discharge Protection:
  The UPS will automatically shut down when the battery voltage reaches the pre-set limit to avoid deep discharge damage.
- Overcharge Protection:
  The UPS monitors the battery voltage while charging and will stop charging when the battery is full to avoid overvoltage.
- Overload Protection:
  If the load exceeds the UPS capacity, it will automatically shut down to prevent damage.

💻 11. PC Communication Software Guide:

- If you require communication software for PC monitoring, please contact Sorotec customer service to get the optional communication card and software setup guidance.

12. UPS Maintenance and Inspection:

- Check if the installation area is clean, dry, and free of dust.
- Ensure power cables are properly connected and not loose.
- Inspect the ventilation holes for dust accumulation and check if the cooling fan is still operational.
- Perform a battery discharge test at least once a month (3–5 minutes) to verify battery backup performance.

13. UPS Battery:

- Designed with a lifespan of 3–5 years.
- Temperature is a key factor affecting battery life.
- If the UPS is stored and unused, recharge the battery every 3 months.

14. Troubleshooting Guide:

Issue	Possible Cause	Solution
UPS not receiving power from the wall socket while the power cord is connected	- Blown AC fuse - Loose power cable - UPS mainboard not detecting utility power	- Check AC fuse position - Check wall socket and power source - Contact SOROTEC Customer Service: **0903.808.500**
UPS does not provide backup power during outage	- Battery not fully charged (e.g. power outage occurred before full recharge)	- Recharge battery for at least 8 hours, then test again

15. Product Features

Model Name	**BX5000**
General	
UPS Topology	Line Interactive
Physical	
Form Factor	Tower
Input	
Nominal Input Voltage (Vac)	220
Input Voltage Range (Vac)	145 ± 5 - 275 ± 7
Input Frequency (Hz)	45 - 65
Input Frequency Detection	Yes
Output	
Capacity (KVA)	5
Capacity (KW)	4
On Battery Waveform	Pure sine wave

On Battery Voltage(s) (Vac)	220 ± 5%
On Battery Frequecy (Hz)	50 ± 0.5
Automatic Voltage Regulation (AVR)	Yes
Power Factor	0.8
Overload Protection	Circuit Breaker
Outlet(s) - Total	8
Outlet Type	IEC Universal *4 & C13 *4
Outlet (s) - Battery & Surge Protected	8
Typical Transfer Time (ms)	2 - 4
Battery	
Battery	12V18AH
Quanlity (Pcs)	4
Charge Current (A)	5
Charger time	4 hours to 90% capacity, fast charger
Battery Type	Sealed lead-acid
Backup Time	
Runtime at 25% Load (min)	26 min 30 seconds
Runtime at 50% Load (min)	10 min 30 seconds
Overload	120% load 5s
Surge Protection & Flltering	
EMI/RFI Filtration	Yes
Management & Communications	
LCD Panel	Display AC mode, Bypass mode, Inverter mode, Input Voltage, Output Voltage, Frequency, Load, Capacity battery...
Audible Alarms	Battery Mode, Low Battery, Overload, UPS Fault
Connect	USB, SNMP Slot,..... (Configurable)
Softwave	Manager Power allows monitoring, automatic on / off UPS and system with all Windows (Configurable)
Physical Size - UPS Module	
UPS Dimensions (D*W*H) (mm.)	575*190*380 ± 2%
UPS Weight (kg.)	49.62 ± 2%
Environmental	
Operating Temperature (độ C)	0 - 40 (non-condensing)
Operating Relative Humidity (Non-condensing) (%)	10 - 90% relative humidity
**Note: Specifications may vary depending on production stage*	