

User Manual Easy-UPS™ BV650-IN/BV1000-IN

Important Safety Information

SAVE THESE INSTRUCTIONS - This manual contains important instructions that should be followed during installation and maintenance of the Easy-UPS and batteries.

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service or maintain it. The following special messages may appear throughout this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a Danger or Warning safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Product Handling Guidelines



<18 kg
<40 lb



18-32 kg
40-70 lb



32-55 kg
70-120 lb



>55 kg
>120 lb



Safety and General Information

Inspect the package contents upon receipt. Notify the dealer if there is any damage.

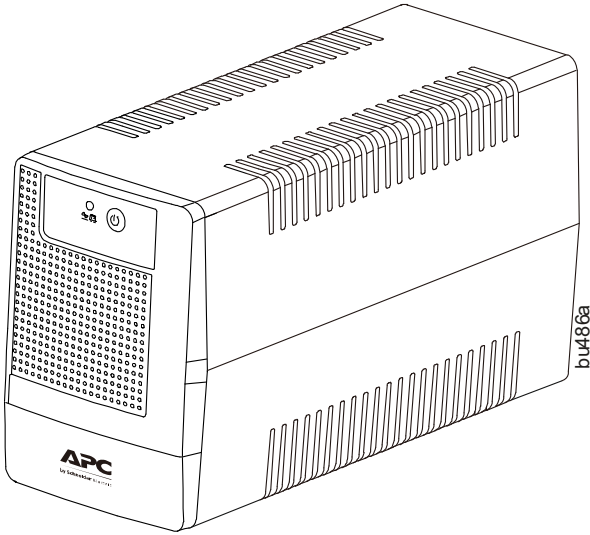
- Adhere to all national and local electrical codes.
- All wiring must be performed by a qualified electrician.
- Changes and modifications to this unit not expressly approved by APC could void the warranty.
- This Easy-UPS is for indoor use only.
- Do not operate this Easy-UPS in direct sunlight, in contact with fluids, or where there is excessive dust or high humidity.
- Do not operate the Easy-UPS near open windows or doors. Be sure the air vents on the Easy-UPS are not blocked. Allow adequate space for proper ventilation.
Note: Allow 20 cm clearance on both front and rear sides of the Easy-UPS.
- The equipment is heavy. Always practice safe lifting techniques adequate for the weight of the equipment.
- The battery typically lasts for two to three years. Environmental factors impact battery life. Elevated ambient temperatures, poor quality utility power, and frequent short duration discharges will shorten battery life.
- Connect the Easy-UPS power cable directly to a wall outlet. Do not use surge protectors or extension cords.
- Do not switch off the utility power to the Easy-UPS. Use the Easy-UPS on/off switch in the front panel to switch on/off the power to the connected loads.
- This Easy-UPS utilizes voltage that may be hazardous. Do not attempt to disassemble the unit. The unit contains no user replaceable parts.
- In the event of an emergency, press the POWER ON/OFF button and disconnect the power cord from the utility power supply to properly disable the Easy-UPS.
- Do not connect loads like medical equipment, life-support equipment, microwave ovens, or vacuum cleaners to Easy-UPS.

Radio Frequency Warning

This is a category C2 UPS product. In a residential environment, this product may cause radio interference, in such a case the user may be required to take additional measures.

Package Contents

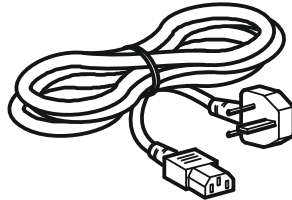
Easy-UPS



User manual



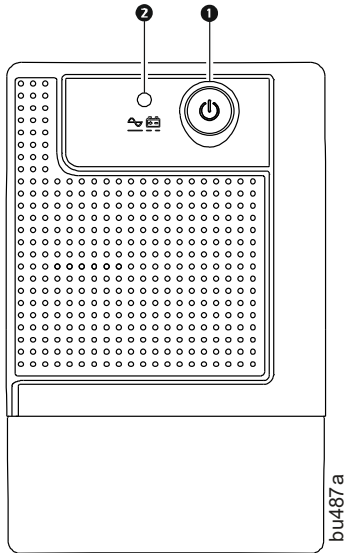
Input power cord



Installation

Front panel features

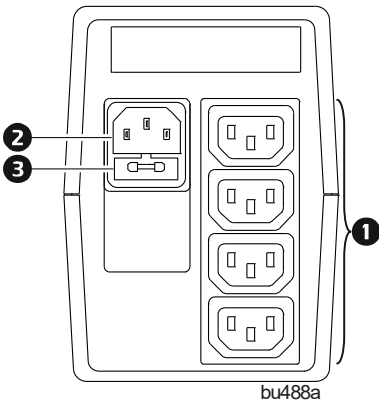
BV650-IN/BV1000-IN



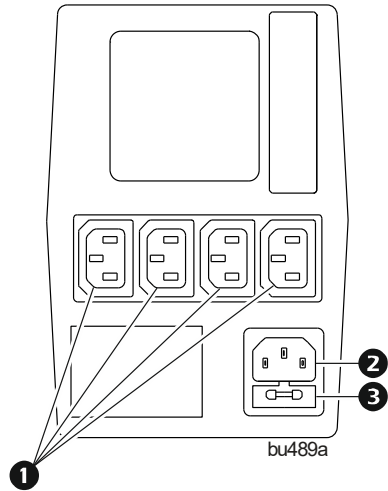
①	Easy-UPS POWER ON/ OFF button	Press the POWER ON/OFF button to switch the Easy-UPS on or off.
②	Status LED	Provides information about the status of Easy-UPS. Refer “Status Indicators” on page 8 for details.

Rear panel features

BV650-IN



BV1000-IN



❶	Battery backup outlets	<p>These outlets help to provide battery backup power to the connected equipment for a limited period of time during power outages and voltage fluctuations. The Battery Backup outlets provide battery power to connected equipment only when the Easy-UPS is turned on. Connect equipment such as desktop computer, modem or other data sensitive devices to these outlets.</p> <p>Note: Connect equipment to these outlets using IEC C14 power cord. Do not use surge protectors or extension cords.</p>
❷	AC input	<p>Use the supplied input power cord to connect the Easy-UPS with the utility power.</p> <p>Note: Ensure that a 10 A / 250 V utility circuit breaker is present at the utility power input.</p>
❸	Input fuse	<p>5 A fuse for BV650-IN 10 A fuse for BV1000-IN</p>

Operation

Turn On the Easy-UPS

Press the POWER ON/OFF button. The **Status** LED will illuminate green. The UPS will start charging the internal battery.

Note: Charge the battery for 6 hours prior to initial use.

The Easy-UPS battery charges to full capacity during the first 10 hours while connected to the utility power. The Easy-UPS battery will charge while the Easy-UPS is turned on or off as long as it is connected to utility power. Do not expect the battery to provide full run-time during the initial charge period.

Turn Off the UPS

Press the POWER ON/OFF button again. The **Status** LED will turn off.

Cold Start Function

When the Easy-UPS is off and there is no utility power, it is still possible to cold start the Easy-UPS to power the loads.

Press the POWER ON/OFF button. The **Status** LED will illuminate green.

Plug in equipment

Connect equipment to Battery backup outlets on the rear panel of the Easy-UPS.

Note: Make sure that the Easy-UPS is powered on to protect all important devices from data loss during power outage.

Note: A laser printer or scanner draws significantly more power than other types of equipment and may overload the Easy-UPS. Do not connect these equipments to the Easy-UPS.

Battery Replacement

CAUTION

RISK OF HYDROGEN SULPHIDE GAS AND EXCESSIVE SMOKE

- Replace the battery at least every 5 years.
- Do not dispose of the batteries in a fire. Do not short the terminals of the battery. The batteries may explode.
- Do not open or mutilate the batteries. Released electrolyte may be toxic and it is harmful to the skin and eyes.
- Replace battery at the end of its service life.
- Replace batteries with the same number and type of batteries as originally installed in the equipment.
- Replace the battery immediately when the UPS indicates a battery over-temperature condition, or UPS internal over-temperature, or when there is evidence of electrolyte leakage. Power off the UPS, unplug it from the AC input, and disconnect the batteries. Do not operate the UPS until the batteries have been replaced.

Failure to follow these instructions could result in equipment damage and minor or moderate injury.

Note: The battery in the Easy-UPS is not user-replaceable. Contact APC by Schneider Electric Support for a list of authorized service centers.

On Mains to On Battery Transfer

The Easy-UPS will switch to battery power if the utility input voltage level does not meet the input voltage range, or if the utility input is experiencing voltage fluctuations. Refer “Specifications” on page 8 for details.

Specifications

	BV650-IN	BV1000-IN
Capacity	650 VA / 360 W	1000 VA / 600 W
Input Voltage	230 V AC	
Input Voltage Range (full load)	200-250 V AC	
Input Voltage Range (derated power)	140-300 V AC	
Output Voltage Regulation	±10% (Battery mode)	
Transfer Time	Typical 4-8 milliseconds	
Waveform	Simulated Sine Wave	
Battery type and no.	12 V / 7 Ah x 1	12 V / 7 Ah x 2
Charging Time	6 to 8 hours typical to reach 90% of rated capacity following a 100% load discharge.	
Dimensions (H x W x D)	142 mm x 101 mm x 279 mm	182 mm x 130 mm x 320 mm
Net Weight	4.2 kg (approx.)	7.8 kg (approx.)
Humidity	0-95% RH @ 0 to 40 °C non condensing	
Noise Level	Less than 40 dBA	

Specifications are subject to change without notice

Status Indicators

Note: If the Easy-UPS detects an internal error, press POWER ON/OFF button once to clear the detected error. If the detected error persists, contact APC by Schneider Electric support.

LED Status	Audible indicator	Condition
Illuminates Green	None	The AC mains is normal and Easy-UPS is operating normally.
Flashing Green every 30 seconds	1 beep every 30 seconds	AC mains outage - Easy-UPS is on battery mode.
Flashing Green every second	1 beep every second	Low battery - The Easy-UPS is supplying battery power to the connected equipment but the battery is nearing fully discharged state.
Not illuminated	None	Easy-UPS is off.

LED Status	Audible indicator	Condition
Not illuminated	Continuous beep	Easy-UPS has detected an internal error / battery needs replacement.
Illuminates green	1 beep every 0.5 seconds	Easy-UPS is experiencing overload condition.

Troubleshooting

Problem	Possible Cause	Corrective Action
The Easy-UPS will not turn on	The Easy-UPS is not switched on.	Press the power switch again to turn on the Easy-UPS.
	Battery voltage is too low.	Allow the Easy-UPS battery to charge for 6 hours before using the Easy-UPS. The battery requires recharging after an extended outage.
	The Easy-UPS has detected an internal battery fault.	Battery needs to be replaced. Contact APC by Schneider Electric.
The Easy-UPS is always on battery mode	The Easy-UPS is not connected to utility power.	Be sure that the Easy-UPS is securely connected to the utility power outlet.
	The input fuse is blown-out.	Replace the input fuse with appropriate rating fuse. Refer “Input fuse” on page 5 for fuse rating.
The Easy-UPS is continuously beeping	The UPS has detected an internal fault.	Contact APC by Schneider Electric.
Back-up time is too short	Battery voltage is too low.	Allow the Easy-UPS battery to charge for 6 hours before using the Easy-UPS. The battery requires recharging after an extended outage.
	The Easy-UPS has experienced an overload condition.	Disconnect non-essential equipment one device at a time to reduce the overload condition.
	The UPS has detected an internal battery fault.	Battery needs to be replaced. Contact APC by Schneider Electric.

Contact APC by Schneider Electric for any other problems.

Service

If the unit requires service, do not return it to the dealer. Follow these steps:

1. Review the *Troubleshooting* section of the manual to eliminate common problems.
2. If the problem persists, contact APC by Schneider Electric Customer Support.
 - a. Note the model number, serial number, and the date of purchase. The model and serial numbers are located on the rear end of the top surface of the unit.
 - b. Contact APC by Schneider Electric Customer Support and a technician will attempt to solve the problem over the phone. If this is not possible, the technician will issue a Service Request Number.
 - c. If the unit is under warranty, the repairs are free.

An Authorized Service Representative will visit your location and try to resolve the issue.

Limited Factory Warranty

Schneider Electric IT Corporation. (SEIT), warrants its products to be free from defects in materials and workmanship for a period of two (2) years from the date of purchase. The SEIT obligation under this warranty is limited to repairing or replacing, at its own sole option, any such defective products or parts thereof. Repair or replacement of a defective product or part thereof does not extend the original warranty period.

This warranty applies only to the original purchaser who must have properly registered the product within 10 days of purchase. Products may be registered online at warranty.apc.com.

SEIT shall not be liable under the warranty if its testing and examination disclose that the alleged defect in the product does not exist or was caused by end user or any third person misuse, negligence, improper installation, testing, operation or use of the product contrary to SEIT recommendations or specifications. Further, SEIT shall not be liable for defects resulting from: 1) unauthorized attempts to repair or modify the product, 2) incorrect or inadequate electrical voltage or connection, 3) inappropriate on site operation conditions, 4) Acts of God, 5) exposure to the elements, 6) theft or 7) normal wear resulting from frequent use. In no event shall SEIT have any liability under this warranty for any product where the serial number has been altered, defaced, or removed.

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To obtain service under warranty you must call customer support. Customers with warranty claims issues may access the SEIT worldwide customer support network through the SEIT Web site: **www.apc.com**. Select your country from the country selection drop down menu. Open the Support tab at the top of the web page to obtain information for customer support in your region. Refer to the product user manual for more information on how to contact customer support.

APC by Schneider Electric Customer Support

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