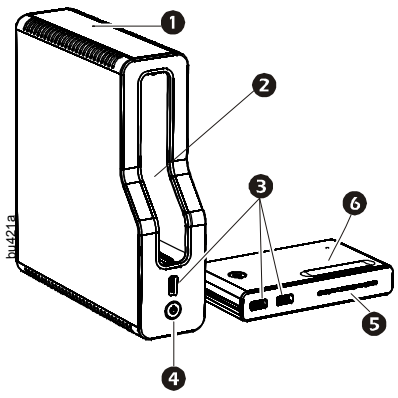
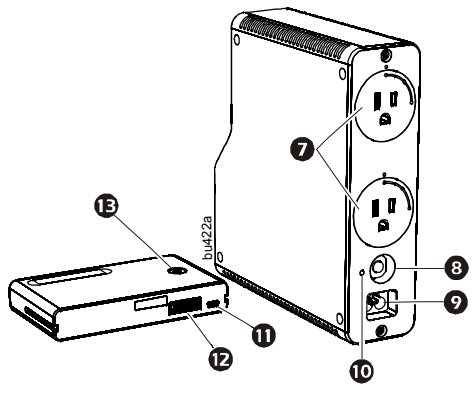
User Manual Back-UPS™ Connect BGE50ML 120 Vac

Inventory

Front View

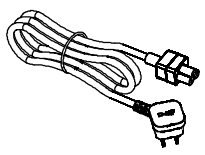


Rear View

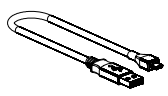


❶ UPS main unit
❷ Battery slot
❸ USB port
❹ UPS POWER button and LED
❺ Capacity indicator LEDs
❻ Mobile power pack (battery)
❼ Rotating outlets
❽ Circuit breaker
❾ AC inlet
❿ Building Wiring Fault indicator
⓫ Micro-USB input
⓬ UPS connector
⓭ Mobile Power Pack POWER button

User Manual



Power cord



USB cable

Stabilizer feet (4 pcs)

Safety and General Information

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

SAVE THESE INSTRUCTIONS - This manual contains important instructions that should be followed during installation and maintenance of the UPS and batteries. Failure to follow these instructions can result in equipment damage.

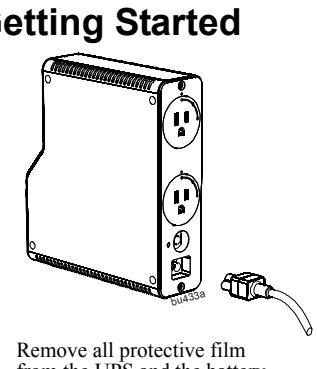
UPS

- This unit is designed for low power devices less than 50 Watts. When the UPS is on battery, the unit will shut down automatically to protect itself once the load on the UPS is greater than 50Watts.
- This UPS is intended for indoor use only.
- Do not operate this UPS in direct sunlight, in contact with fluids, or where there is excessive dust or humidity.
- Be sure the air vents on the UPS are not blocked. Allow adequate space for proper ventilation.
- The battery typically lasts for three to five years. Environmental factors impact battery life. Elevated ambient temperatures, poor quality AC power, and frequent short duration discharges will shorten battery life.
- Connect the UPS power cable directly to a wall outlet.

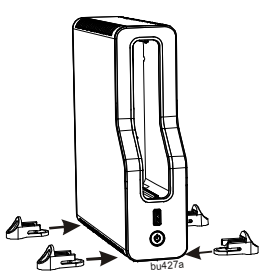
Mobile Power Pack (battery)

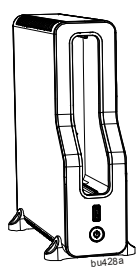
- Do not short circuit this device. To avoid short circuit, keep the device away from any metal objects (e.g., hair clips and keys).
- It is normal that the battery will feel warm during heavy use.
- Use this device as instructed to avoid electric shock; do not disassemble.
- This unit is not user repairable; contact APC for tech support related issues.
- Do not heat this device or throw it into a fire.
- Do not drop or place the unit under a heavy object.
- Keep this device away from high temperature, wet, or dusty environments.
- During normal usage keep the device out in the open to allow excess heat to dissipate.
- Charge M12USWH for 2.5 hours before initial use.
- Keep the USB output port and micro-USB input port clean and free of obstruction.

Getting Started



Remove all protective film from the UPS and the battery. Plug the power cord into the back of the unit.



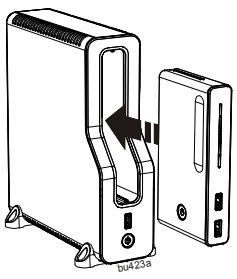


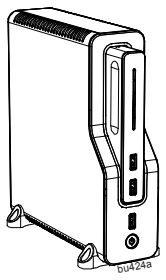
Install the stabilizer feet using the 4 slots at the ends of each row of ventilation holes

Connect the Battery

Remove all plastic films. With the USB ports positioned at the bottom, insert the mobile battery pack into the main unit.

When the battery is inserted one LED will illuminate moving from the bottom to the top to confirm that the battery has been inserted properly.





Using the UPS

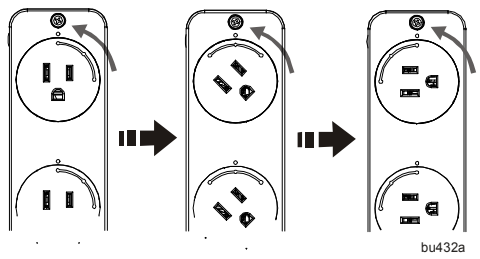
Press the POWER button located in front of the UPS. The POWER button LED will illuminate and a single short beep will be audible to indicate that the UPS is turning on.

The UPS provides surge protection and battery backup to low power equipment like modems, gateways, routers, cordless phone base units and VoIP base units.

Note that high power devices like PCs or monitors may overload the UPS during a blackout. It is recommended that only low power devices be connected.

Rotating Outlets

Both outlets can be rotated 90° and 45° to minimize adapter plug interference.



USB charging ports

The three USB ports provide a total of 4.4A of DC power, and will provide power even when the unit is on battery.

Fast charging is available at the 2.4A USB port. This port integrates Smart Charging technology to maximize output according to the smartphone or tablet detected.

Surge Only Mode

The battery can be removed and the UPS will continue to provide surge protection for the connected AC devices. When the battery is removed the POWER button LED will illuminate amber. In this mode the USB port will continue to provide charging power for smartphones and other USB devices.

Mobile Power Pack

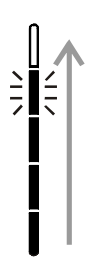
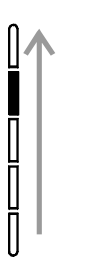
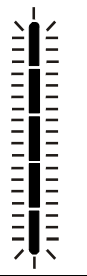
When removed from the UPS the battery can be used as a mobile power pack to charge devices in a mobile environment.

To turn on the battery press the POWER button on the battery. The LEDs will illuminate to show battery capacity. After 20 seconds the unit will enter a power saving mode if it is not charging a device or being charged. If the unit is charging a device or being charged, after 20 seconds the LEDs will dim down to 10% brightness. Pressing the POWER button at any time will cause the LEDs to illuminate at 100% brightness for 20 seconds.

Battery Charge and Capacity Information

- Charge battery in the UPS for 2.5 hours prior to initial use. The battery will charge whether the UPS is on or off as long as there is AC power to the UPS.
- Do not expect full battery runtime capability during the initial charge period.
- To charge the battery using the micro-USB input, connect the battery to any USB charging port. When separate from the UPS, battery charging is slower. When charging the battery using the USB port on a PC, the LEDs will flash more slowly to indicate slower rate of charge.
- UPS runtime information is available on the APC Web site, www.apc.com.

Mobile Power Pack Status Indicators

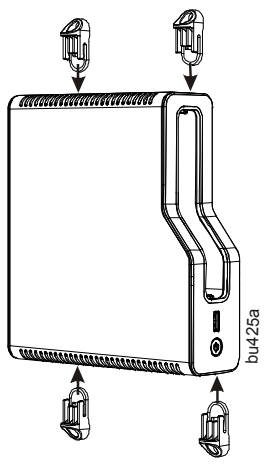
Indicator	81-100% 61-80% 41-60% 21-40% 0-20%			
Status	Battery Full	Battery charging	Battery Insertion	Fault detected on USB ports
Mobile Power Pack LEDs	All 5 LEDs illuminate green	LEDs indicate charge level. Top LED flashes.	One LED illuminates green from bottom to top	All 5 LEDs flash green

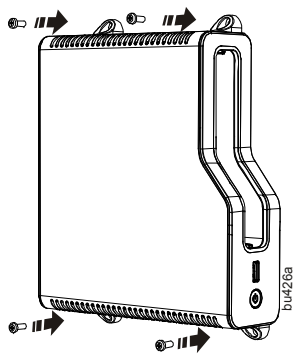
UPS Status Indicators

Event	POWER Button LED	Audible Indicator On
On Battery	The LED flashes green.	Not applicable
Surge Only Mode	The LED illuminates amber.	Not applicable
Low Battery alarm The UPS is supplying battery power and the battery is near a total discharge state.	The LED illuminates green and flashes rapidly.	The UPS emits 2 short beeps every 30 seconds.
Replace Battery The battery is worn or needs to be replaced.	The LED illuminates red only.	None
Overload Shutdown While on battery power an overload condition has occurred in one or more of the battery backup outlets while the UPS is operating on battery power.	None	Constant tone
USB Detected Fault An error has occurred in the USB charger on the UPS.	The LED alternately illuminates green / amber.	None

Wall Mount Installation

- Vertical installation, use 4 screws 15/16” (100 mm) in diameter. (Screws are not provided.)
- Install the stabilizer feet using the 4 slots at the ends of each row of ventilation holes as seen in the figure below.
- Orient the UPS to the desired location. Mount screws directly into stabilizer feet starting with the bottom pair.





Voltage Sensitivity Adjustment (optional)

The UPS detects and reacts to line voltage distortions by transferring to battery backup power to protect connected equipment. In situations where either the UPS or the connected equipment is too sensitive for the input voltage level it is necessary to adjust the transfer voltage.

1. Connect the UPS to a wall outlet but make sure it is off.
2. Press and hold the POWER button. After 10 seconds the POWER button LED will illuminate alternately green-red to indicate that the UPS is in **Program** mode.
3. After releasing the POWER button the POWER button LED will illuminate either green, amber, or red to indicate the current sensitivity level. Press the POWER button to change sensitivity. Refer to the table below for an explanation of the sensitivity setting and transfer voltage sensitivity level that corresponds to each LED color.
4. To exit **Program** mode wait five seconds and all LED indicators will extinguish. **Program** mode is no longer active.

LED Flashes	Sensitivity Setting	Input Voltage Range (AC Operation)	Recommended Use
Green	LOW	88 Vac to 142 Vac	Use this setting with equipment that is less sensitive to fluctuations in voltage or waveform distortions.
Red	MEDIUM	92 Vac to 139 Vac	Factory default setting. Use this setting under normal conditions.
Amber	HIGH	96 Vac to 136 Vac	Use this setting when connected equipment is sensitive to voltage and waveform fluctuations.

Mute Low Battery Alarm

Follow the instructions below to adjust the audio setting of the UPS to enable or disable low battery alarm. To change the setting make sure the UPS is on.

Make sure the unit is on. Press and hold the POWER button**.** Releasing the POWER button after hearing the 3rd short beep will toggle the low battery alarm mute function. The UPS will emit a short double beep to confirm that the low battery alarm has been disabled. If the UPS emits a 1-second beep it indicates that the low battery alarm is audible.

Note: The default setting of the low battery alarm is audible.

UPS Specifications

AC Input	Voltage	120 Vac Nominal
	Frequency	50/60 Hz ± 3Hz auto-sensing
	Brownout Transfer	92 Vac Typical
	Over-voltage Transfer	139 Vac Typical
	Protection	Resettable circuit breaker
	Surge Protection	Computer grade
AC Output	UPS Capacity	84 VA, 50 W
	Total Amperage (AC outlets)	0.7 A
	Voltage - On Battery	115 Vac ± 8%
	Frequency - On Battery	50/60 Hz ± 1
	Transfer Time	6 ms Typical, 10 ms maximum
USB Output	Output Current	1.0A
	Output Voltage	5V
	Charger Compatibility	USB Battery Charging Specification 1.2
Physical	Net Weight	1.7 lb (0.8 kg)
	Dimensions Length x Width x Height	7.7 in x 7.0 in x 2.1 in (19.6 cm x 17.8 cm x 5.4 cm)
	Operating Temperature	32º F to 104º F (0º C to 40º C)
	Storage Temperature	5º F to 113º F (–15º C to 45º C)
	Operating Relative Humidity	0 to 95% non-condensing humidity
	Operating Elevation	0 to 10,000 ft (0 to 3000 m)
Cord Lengths	Power Cord	59.0 in (150.0 cm)
	USB Cord	11.0 in (27.9 cm)

Mobile Power Pack (battery) Specifications

Type	Lithium-ion battery
Capacity	11400mAh
Rating	41.2 Wh
Input current (Maximum)	micro-USB: 2.1A
Rated input voltage	5V dc
Output current	USB1: 2.4A, USB2: 1.0A
Output voltage	5V
Capacity indicator light	5 level LEDs
Capacity indicator brightness levels	50% in the UPS. As mobile power pack 100% after pressing the POWER button. 10% after 20 seconds when charging a device or being charged.
Charging time	2.5 hours (UPS), 8 hours (micro-USB)
Dimensions (L x W x H)	5.1 x 2.9 x 0.9 in (13.0 x 7.4 x 2.2 cm)
Weight	0.6 lb (267g)
Operating temperature	32°F- 104°F (0°C- 40°C)
Smart Charging (2.4A port only)	Maximum output depends on the client device.

Replace Battery

Deliver the used battery to a recycling facility.

Replace the used battery with an APC by Schneider Electric approved battery. Replacement batteries can be ordered through the APC by Schneider Electric Web site, **www.apc.com**. Battery replacement part for UPS BGE50ML is **M12USWH**.

Warranty

Schneider Electric IT (SEIT) warrants its products to be free from defects in materials and workmanship for a period of three (3) years from the date of purchase. SE IT obligation under this warranty is limited to repairing or replacing, at its sole discretion, any such defective products. This warranty does not apply to battery wear from use, equipment that has been damaged by accident, negligence or misapplication or has been altered or modified in any way. SEIT standard procedure is to replace the original unit with a factory reconditioned unit. Customers who must have the original unit back due to the assignment of asset tags and set depreciation schedules must declare such a need at first contact with an SEIT Technical Support representative. SEIT will ship the replacement unit once the defective unit has been received by the repair department, or cross ship upon the receipt of a valid credit card number. The customer pays for shipping the unit to SEIT. SEIT pays ground freight transportation costs to ship the replacement unit to the customer. For full warranty information refer to www.apc.com.

Troubleshooting

Problem and Possible Cause	Solution
The UPS will not turn on	
The UPS has not been turned on.	Press the POWER button.
The UPS is not connected to AC power, there is no AC power available at the wall outlet, or the AC power is experiencing a brownout or over voltage condition.	Make sure the battery has been inserted into the UPS when attempting to turn on the UPS without AC power. In the event that the UPS receives no AC power and the battery is connected, a cold-start can be initiated. Press and hold the POWER button until the UPS emits two beeps.
The UPS is on, the POWER button illuminated red	
The battery is worn or needs repair..	Contact Schneider Electric IT (SEIT) Technical Support for more in depth troubleshooting..
Connected equipment loses power	
A UPS overload condition has occurred.	Remove all nonessential equipment connected to the outlets. Reconnect equipment to the UPS, one device at a time.
The battery is completely discharged.	Connect the UPS to AC power to allow the battery to recharge.
The UPS may require service.	Contact Schneider Electric IT (SEIT) Technical Support for more in depth troubleshooting.
The UPS has an inadequate battery runtime	
The battery is not fully charged. The battery is near the end of useful life and should be replaced.	Leave the UPS connected to AC power for 2.5 hours while the battery charges to full capacity. As a battery ages, the runtime capability decreases. Contact APC by Schneider Electric at the Web site **www.apc.com**, to order replacement batteries.
USB charging is slow	
Charging a device using the UPS's USB charger is slower than the device's original USB charger	The amount of power a device draws depends on its compatibility with the USB Battery Charging Specification 1.2. Compatible devices can draw more power than devices that are less compatible. For devices that can charge using input greater than 1A make sure that the device is connected to the 2.4A USB charging port.
USB charging stops and the POWER button LED alternately illuminates green / amber	
The USB port on the UPS is overloaded or has encountered an error.	Disconnect device from the USB port on the UPS. USB charging will resume when the LED turns green. Contact SEIT Technical Support if the LED continues to alternate green / amber.
USB charging stops and the battery pack capacity indicators LEDs all flash simultaneously	
One or two USB ports on the mobile power pack is overloaded or has encountered an error.	Disconnect device(s) from the USB port(s) on the mobile power pack. When the mobile power pack is not paired with the UPS the power pack will enter safe mode if the USB error has not been resolved within 30 seconds.
Battery charging is slow	
The charging time of battery varies depending on the charging connection.	Charge the battery inside the UPS for best results. Using the micro-USB port to charge the battery will require more time. The speed is also dependent on the type of USB charger. Some USB chargers support 1A and others up to 2.4A. More powerful chargers will reduce the time required. USB ports on a PC can also charge the battery but older PCs only support 500mA which will result in even more time to charge.

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 Schneider Electric IT (SEIT) Customer Support through the APC by Schneider Electric Web site, **www.apc.com**.
   a. Note the model number and serial number and the date of purchase.
   b. Call SEIT Customer Support and a technician will attempt to solve the problem over the phone. If this is not possible, the technician will issue a Returned Material Authorization Number (RMA#).
   c. If the unit is under warranty, the repairs are free.
   d. Service procedures and returns may vary internationally. Refer to the APC by Schneider Electric Web site for country specific instructions.
3. Pack the unit in the original packaging whenever possible to avoid damage in transit. Never use foam beads for packaging. Damage sustained in transit is not covered under warranty.
4. **Always DISCONNECT THE UPS BATTERIES before shipping. The United States Department of Transportation (DOT), and the International Air Transport Association (IATA) regulations require that UPS batteries be disconnected before shipping.** The internal batteries may remain in the UPS.
5. Write the RMA# provided by Customer Support on the outside of the package.
6. Return the unit by insured, pre-paid carrier to the address provided by Customer Support

APC by Schneider Electric IT Customer Support Worldwide

For country specific customer support, go to the APC by Schneider Electric Web site, www.apc.com.

EMC Compliance

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

BC

This UPS is certified to comply with California Battery Charger System regulations. For more information go to www.apc.com/site/recycle/index.cfm/energy-efficiency/cec-battery-charger/

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