

APC™ Back-UPS™ BVX 600/700/1200 -BR, BVX600/700/1200 I-BR, BVX 600/700/1200 BI-BR

Important Safety Instructions

SAVE THESE INSTRUCTIONS - This manual contains important instructions that should be followed during installation and maintenance of the 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 document 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 either 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 2kg <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 carrier and dealer if there is any damage.

Read the Safety Guide supplied with this unit before installing the unit.

- 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 Schneider Electric could void the warranty.
- This Back-UPS is for indoor use only.
- Do not operate this Back-UPS in direct sunlight, in contact with fluids, or where there is excessive dust or high humidity.
- Do not operate the Back-UPS near open windows or doors. Be sure the air vents on the Back-UPS are not blocked. Allow adequate space for proper ventilation.

NOTE: Allow a minimum of 20 cm clearance on both front and rear sides of the Back-UPS.

- Connect the Back-UPS to an earthed mains socket.
- Connect the power cord of the Back-UPS directly to a wall outlet. Do not use surge protectors or extension cords.
- Do not switch off the utility power to the Back-UPS. Use the Back-UPS POWER ON/OFF switch in the front panel to switch *on/off* the power to the connected loads.
- 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 completely disable the Back-UPS.
- Do not connect loads like medical equipment, life-support equipment, microwave ovens, laser printers or vacuum cleaners to Back-UPS.
- For user safety, persons not authorized by Schneider Electric are not allowed to disassemble or repair this equipment.

Battery safety



CAUTION

RISK OF HYDROGEN SULPHIDE GAS AND EXCESSIVE SMOKE

- Replace the battery at least every 5 years or at the end of its service life.
- Replace the battery immediately when the Back-UPS indicates battery replacement is necessary.
- Replace batteries with the same number and type of batteries as originally installed in the Back-UPS.
- Replace the battery immediately when the Back-UPS indicates a battery over-temperature condition, or when there is evidence of electrolyte leakage. Power off the Back-UPS, unplug it from the AC input, and disconnect the batteries. Do not operate the Back-UPS until the batteries have been replaced.

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


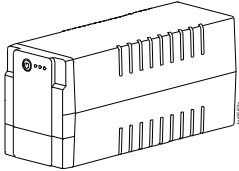
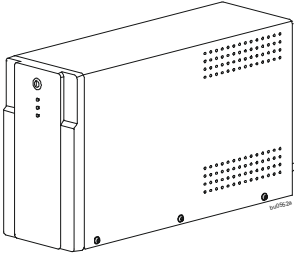
- For the recycling battery information, go to apc.com/recycle.
- Servicing of batteries should be performed or supervised by personnel knowledgeable about batteries and required precautions. Keep unauthorized personnel away from batteries. In this case, batteries are not user replaceable.
- Schneider Electric uses Sealed Maintenance-Free Lead Acid batteries. Under normal use and handling, there is no contact with the internal components of the batteries. Over charging, over heating or other misuse of batteries can result in leakage of battery electrolyte. Released electrolyte is toxic and may be harmful to the skin and eyes.
- The battery typically lasts about three years. Environmental factors impact battery life. Elevated ambient temperatures, frequent short duration discharges due to poor quality utility power will shorten battery life.
- CAUTION: A battery can present a risk of electrical shock and high short circuit current. The following precautions should be observed when working on batteries:
 - Use tool with insulated handles.
 - Wear rubber gloves and boots.
 - Do not lay tools or metal parts on top of batteries.
 - Disconnect the charging source prior to connecting or disconnecting battery terminals.
 - Determine if battery is either intentionally or inadvertently grounded. Contact with any part of a grounded battery can result in electric shock or burns by high short-circuit current. The risk of such hazards can be reduced if grounds are removed during installation and maintenance by a skilled person.
- CAUTION: Failed batteries can reach temperatures that exceed the burn threshold for touchable surfaces.
- CAUTION: Before installing or replacing the batteries, remove conductive jewelry such as chains, wrist watches, and rings. High energy through conductive materials could cause severe burns.

- CAUTION: Do not dispose of batteries in a fire. The batteries may explode.
- CAUTION: Do not open or mutilate batteries. Released material is harmful to the skin and eyes and may be toxic.

Radio Frequency Warning

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

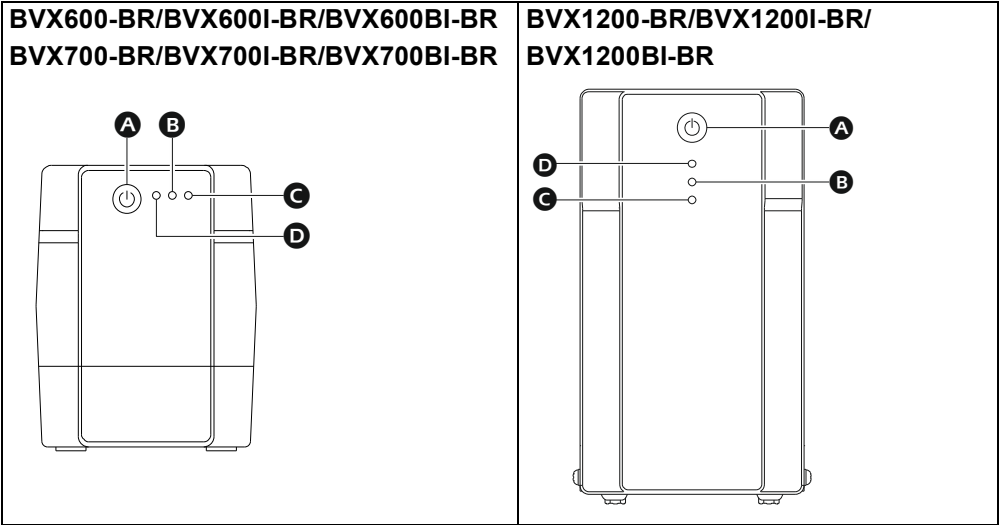
Inventory

Common to all models	BVX 600/700 Series	BVX 1200 Series
User documentation 	Back-UPS 	Back-UPS 

Product Description

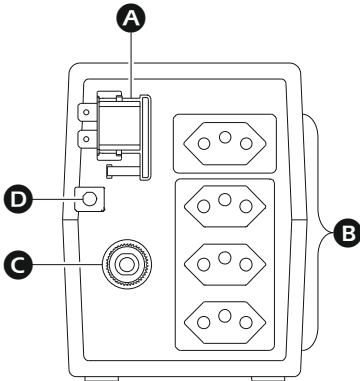
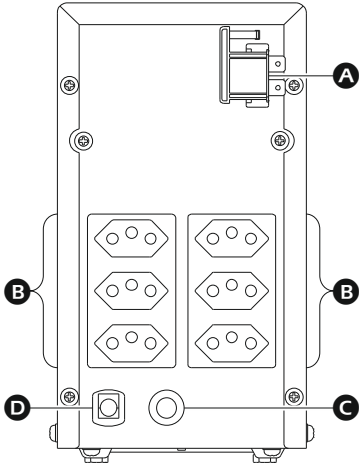
The APC™ Back-UPS helps to provide power for wireless networks, computers, gaming consoles and other electronics in your business during power outages and voltage fluctuations, as well as helps to provide protection from power surges and sags.

Front Panel Features



A	POWER ON/OFF button	Press the POWER ON/OFF button to turn the UPS <i>on</i> or <i>off</i> .
B	On-battery LED	Illuminates when the UPS is supplying battery power to the connected equipment. Refer to “Status Indicators” on page 10 for details.
C	Alert LED	Illuminates when an alert event occurs. Refer to “Status Indicators” on page 10 for details.
D	On-line LED	Illuminates when the UPS is supplying utility power to the connected equipment. Refer to “Status Indicators” on page 10 for details.

Rear Panel Features

<div><div><div>BVX600-BR/BVX600I-BR/BVX600BI-BR BVX700-BR/BVX700I-BR/BVX700BI-BR</div><div></div></div></div> <div><div><div>BVX1200-BR/BVX1200I-BR/ BVX1200BI-BR</div><div></div></div></div>	
<div><div>A</div><div>Battery connector</div></div>	Connects the battery to the UPS.
<div><div>B</div><div>Battery backup and surge protection outlets</div></div>	<p>These outlets help provide power from the battery to the connected equipment for a limited period of time during power outage, or brownout condition and helps to protect the connected equipment from power surges or spikes, when the UPS is connected to utility power and turned <i>on</i>.</p> <p>Connect equipment such as a computer, monitor and other peripheral devices which need to remain <i>on</i> during power outages or brownout condition, to these outlets.</p>
<div><div>C</div><div>Circuit breaker</div></div>	Trips when the UPS experiences an overload condition.
<div><div>D</div><div>Input power cord</div></div>	Connect the Input power cord to a wall outlet (utility power).

Specifications

Environmental Specifications

NOTICE		
RISK OF EQUIPMENT DAMAGE		
<ul style="list-style-type: none"> UPS must be used indoors only. The location of installation should be sturdy to withstand the weight of the UPS. Do not operate the UPS where there is excessive dust or where the temperature or humidity are outside the specified limits. 		
Failure to follow these instructions can result in equipment damage.		
Temperature	Operating	0 to 40 °C
	Storage	–15 to 45 °C
Elevation	Operating	0 to 1,000 m: normal operation 1,000 to 3,000 m: The output power reduces @ 1% for every 100 m increase in height
	Storage	0 to 3,000 m
Humidity		0 to 95% relative humidity, non-condensing
International Protection Code		IP20
Pollution Degree		2

NOTE: Charge the battery of the Back-UPS at-least once in every six months during storage.

Physical Specifications

	BVX600-BR/BVX600I-BR	BVX600BI-BR
Weight without packaging	5.20 kg	6.00 kg
Dimensions without packaging H x W x D	140 x 110 x 305 mm	
Weight with packaging	5.80 kg	6.60 kg
Dimensions with packaging H x W x D	217 x 180 x 390 mm	
	BVX700-BR/BVX700I-BR	BVX700BI-BR
Weight without packaging	5.30 kg	6.10 kg
Dimensions without packaging H x W x D	140 x 110 x 305 mm	
Weight with packaging	5.90 kg	6.70 kg
Dimensions with packaging H x W x D	217 x 180 x 390 mm	
	BVX1200-BR/BVX1200I-BR	BVX1200BI-BR
Weight without packaging	10.25 kg	11.55 kg
Dimensions without packaging H x W x D	225 x 125 x 380 mm	
Weight with packaging	11.16 kg	12.46 kg
Dimensions with packaging H x W x D	314 x 194 x 488 mm	

Electrical Specifications

Overvoltage category	II
Applicable power grid distribution system	TN Power System
Applicable standard	IEC 62040-1

	BVX600-BR BVX700-BR	BVX600I-BR BVX700I-BR	BVX600BI-BR BVX700BI-BR
Input			
Voltage	115 Vac	220 Vac	115/220 Vac (auto selection)
Input voltage range	93 - 150 Vac	182 - 260 Vac	115 V: 93 - 150 Vac 220 V: 182 - 260 Vac
Frequency Range	57 to 63 Hz		
Output			
Sockets	NBR 14.136:2002 10A - 4 nos.		
Capacity	BVX600-BR/BVX600I-BR: 600 VA / 360 W BVX700-BR/BVX700I-BR: 700 VA / 420 W		BVX600BI-BR: 115 V: 600 VA / 360 W 220 V * : 600 VA / 300 W BVX700BI-BR: 115 V: 700 VA / 420 W 220 V **: 700 VA / 350 W
Regulation	On-line mode: +15%, –12% Battery mode: ±6%		
Frequency (On Battery)	60 Hz ± 1%		
Protection	Resettable circuit breaker		
Battery			
Type	Sealed Maintenance Free, Valve Regulated Lead Acid (SMF-VRLA)		
Rating	12 V, 7 Ah x 1		
Typical Recharge Time	6 hours to reach 90% capacity		

* The thermal protection in the UPS will get activated if the rating of the connected equipment exceeds 300 VA / 300 W

** The thermal protection in the UPS will get activated if the rating of the connected equipment exceeds 350 VA / 350 W.

	BVX1200-BR	BVX1200I-BR	BVX1200BI-BR
Input			
Voltage	115 Vac	220 Vac	115/220 Vac (auto select)
Input voltage range	93 - 150 Vac	182 - 260 Vac	115 V: 93 - 150 Vac 220 V: 182 - 260 Vac
Frequency Range	57 to 63 Hz		
Output			
Sockets	NBR 14.136:2002 10A - 6 nos.		
Capacity	1200 VA / 720 W		115 V: 1200 VA / 720 W 220 V *: 1200 VA / 720 W
Regulation	On-line mode: +15%, -12% Battery mode: ±6%		
Frequency (On Battery)	60 Hz ± 1%		
Protection	Resettable circuit breaker		
Battery			
Type	Sealed Maintenance Free, Valve Regulated Lead Acid (SMF-VRLA)		
Rating	12 V, 7 Ah x 2		
Typical Recharge Time	6 hours to reach 90% capacity		

* The thermal protection in the UPS will get activated if the rating of the connected equipment is greater than 600 VA / 600 W.

Status Indicators

UPS Status		On-line LED	On-battery LED	Alert LED
Off		Not illuminated	Not illuminated	Not illuminated
Standby mode	On-line standby	Not illuminated	Not illuminated	Not illuminated
	On-battery standby			Illuminates for 20 seconds after input supply is turned off
Self test		Flashes every 2 seconds	Not illuminated	Not illuminated
On-line mode	Normal on-line mode	Illuminated	Flashes every 4 seconds when battery is charging.	Not illuminated
	On-line overload alert		Not illuminated when battery is charged 100%	Flashes every 2 seconds
	Battery disconnected or needs replacement		Flashes every 2 seconds	Not illuminated
Battery mode	Normal battery mode	Not illuminated	Illuminated	Not illuminated
	Low battery mode			
	On-battery overload alert			Flashes every 2 seconds
	Low battery shutdown		Not illuminated	Not illuminated
Internal Error detected				Illuminated

Installation



CAUTION

RISK OF FALLING EQUIPMENT

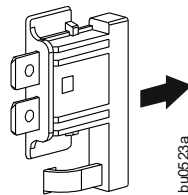
Always practice safe lifting techniques adequate for the weight of the equipment.

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

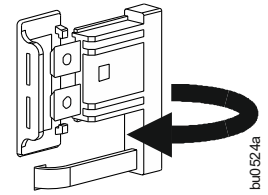
Connect battery

BVX600-BR/BVX600I-BR/BVX600BI-BR/BVX700-BR/BVX700I-BR/BVX700BI-BR

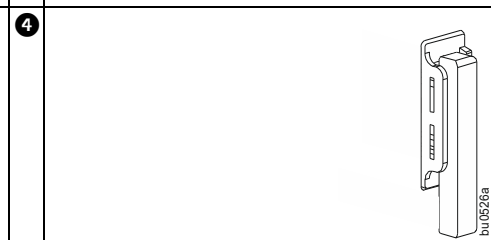
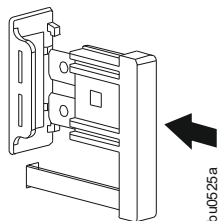
- 1** Pull the Battery Connector from its seating.



- 2** Rotate the Battery Connector.

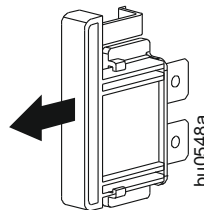


- 3** Push the battery connector into the slot till it locks in position.

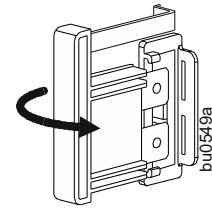


BVX1200-BR/BVX1200I-BR/BVX1200BI-BR

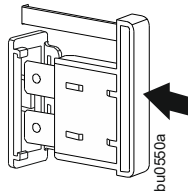
- 1** Pull the Battery Connector from its seating.



- 2** Rotate the Battery Connector.



- 3** Push the battery connector into the slot till it locks in position.



Operation

Turn On the Back-UPS

1. Plug the Back-UPS power cord directly into a wall outlet.
2. To turn *on* the Back-UPS, press and hold the POWER ON/OFF button and release it when a beep is heard.

The green LED illuminates confirming that the Back-UPS is *on* and is ready to help provide protection to the connected equipment.

The yellow LED flashes to indicate the battery charging status.

The Back-UPS battery should be charged at least 12 hours to ensure sufficient run time. The Back-UPS battery will charge as long as the Back-UPS is connected to utility power irrespective of whether the UPS is turned *on* or *off*.

Do not expect the battery to run for its expected capacity during the initial discharge period. The battery will have full capacity after the initial 24 hour charging period.

Turn Off the Back-UPS

To turn *off* the Back-UPS, press and hold the POWER ON/OFF button and release it when a beep is heard. All the LEDs will turn *off*.

Cold Start the Back-UPS

To turn *on* the Back-UPS when there is no utility power, press and hold the POWER ON/OFF button and release it when a beep is heard to supply the battery power to the connected equipment.

Automatic Voltage Regulation (AVR)

Automatic Voltage Regulation boosts/trimms the AC voltage when it varies from the specified levels. This allows the connected equipment to operate during high/low voltage conditions, conserving battery power. The Back-UPS will switch to battery power if the input voltage level becomes too low/high or if the AC input voltage is distorted.

No-Load shut down

When the UPS is operating on battery mode and detects that the connected equipment is using less than 5% of output rated power for more than 10 minutes, the UPS will shut down to conserve energy.

When the UPS is reconnected to AC power, the UPS will automatically turn on.

Quick mute/unmute

The audible alarms can be muted/unmuted by pressing the POWER ON/OFF button.

A short press of the POWER ON/OFF button toggles between mute and unmute. A single beep indicates that the audible alarms are muted and a double beep indicates that the audible alarms are unmuted.

NOTE:

- Muting of audible alarm is temporary and gets reset to unmuted when the Back-UPS status changes.
- Audible alarms of events which require user's action cannot be muted.

Voltage Sensitivity Adjustment

Be sure that the Back-UPS is turned off. Press and hold the POWER ON/OFF button for 4 seconds till the second beep is heard, indicating that the Back-UPS is in voltage sensitivity setting mode. A short press of POWER ON/OFF button changes the voltage sensitivity.

If no button press is detected by the Back-UPS, it exits the voltage sensitivity setting mode.

LED Status	Sensitivity Setting	Input Voltage Range	Recommended Use
Alert LED illuminates	Low	115 V: 91 to 153 Vac 220 V: 180 to 265 Vac	Use this setting with equipment that are less sensitive to fluctuations in voltage or waveform distortions.
Both Alert LED and On-battery LED illuminate	High/ Medium	115 V: 93 to 150 Vac 220 V: 182 to 260 Vac	Factory default setting. Use this setting under normal conditions.

Self Test

The Back-UPS will perform an automatic test of the battery when the UPS is turned on or the UPS is operating in on-line mode, once in every 14 days. When the UPS is operating in on-line mode, press and hold the POWER ON/OFF button till 3 beeps are heard to perform a manual battery self test. The LED flashes indicating that the UPS is executing a self test.

NOTE: Self test can be done only when the battery is fully charged and the UPS is working in on-line mode.

Troubleshooting

Detected Problem and Possible Cause	Corrective Action
The Back-UPS will not turn on.	
The Back-UPS has not been turned <i>on</i> .	Press the POWER ON/OFF button.
The Back-UPS is not connected to utility power, or there is no utility power available at the wall outlet, or the utility power is experiencing a brownout or over voltage condition.	Be sure that the power cord is securely connected to the wall outlet, and that the utility power is available at the wall outlet. Where applicable, be sure that the wall outlet is switched <i>on</i> .
Battery is not connected	Connect the battery. Refer to “Connect battery” on page 11 for details.
Back-UPS circuit breaker tripped.	<ol style="list-style-type: none"> 1. Disconnect all nonessential equipment connected to the outlets. 2. Reset the circuit breaker by pushing in the circuit breaker button fully inwards until it latches. 3. If the circuit breaker resets, switch <i>on</i> the Back-UPS and reconnect one equipment at a time to the Back-UPS. 4. If the circuit breaker trips again, it is likely that one of the connected devices is causing the overload.
Connected equipment loses power.	
An overload condition has occurred.	<ul style="list-style-type: none"> • Disconnect all equipment connected to the outlets. Reconnect one equipment at a time to the Back-UPS. • If the overload condition still occurs, contact customer support.
The Back-UPS battery is completely discharged.	Connect the Back-UPS to utility power and allow the battery to recharge for 24 hours.
Connected equipment does not accept the step-approximated sine wave from the Back-UPS.	<p>The output waveform is intended for computers and peripheral devices only.</p> <p>The UPS is not intended for use with motor driven equipment.</p>
The Back-UPS has an inadequate battery runtime.	
The battery is not fully charged.	<p>Leave the Back-UPS connected to utility power for 24 hours while the battery charges to full capacity.</p> <p>As a battery ages, the runtime capability decreases. It is necessary to replace the battery.</p>
The battery is near the end of useful life and should be replaced.	Contact customer support for replacing the battery.
The Red LED flashes or is continuously illuminated and continuous beep is heard.	
The UPS has detected an internal error.	Refer to “Status Indicators” on page 10 for details and take appropriate corrective action.
The UPS may require to be serviced.	Contact customer support.

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 Customer Support.
 - a. Note the model number and serial number and the date of purchase. The model and serial numbers are located on the rear panel of the unit.
 - b. Call 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.
 - d. Service procedures and returns may vary internationally. Refer to Schneider Electric website for country specific instructions.
 - e. **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.
 - f. Write the RMA# provided by Customer Support on the outside of the package.
 - g. Return the unit by insured, pre-paid carrier to the address provided by Customer Support.

Warranty

Register your product online. portalgarantia.apc.com.

Access the FAQ: <https://www.se.com/br/pt/faqs/FAQ000240000/> to check the procedure.

The guarantee is directly related to the fulfillment of all the recommendations indicated in the Installation and Use Manual that accompanies the product, whose reading is highly recommended.

APC by Schneider Electric grants this product - excluding batteries - a total free warranty of 2 (two) years, with 3 (three) months of legal warranty, plus 1 (one) year and 3 (three) months of contractual warranty, and an additional 6 (six) months of contractual warranty, if the consumer registers the product on the portalgarantia.apc.com website within 90 (ninety) days from date of issuance of the Invoice. Any manufacturing defects that may be identified will be covered within this period, starting from the date of issuance of the Invoice.

The manufacturer grants the batteries that accompany the product a total warranty of 1 (one) year, with 3 (three) months of legal warranty and 9 (nine) months of contractual warranty. It is important that the product is tested at the time of purchase.

The guarantee will be valid for the legal period specified above, commencing from the date of purchase by the first end consumer, even if the ownership of the product has been transferred.

Once a defect is observed, the consumer must activate the warranty via the Warranty Portal: portalgarantia.apc.com and if in doubt, follow the instructions in FAQ: <https://www.apc.com/br/pt/faqs/FAQ000233422/>. Examination and repair of the product may only be carried out by the manufacturer. Referral for repairs must be

made exclusively by the consumer. No dealer or service station is authorized by APC by Schneider Electric to perform these actions for the consumer. All possible damages or delays resulting from non-observance of these recommendations are beyond the responsibility of APC by Schneider Electric

Within the warranty period, the exchange of defective parts, parts and components will be free of charge, as will the labor applied. This warranty does not, however, cover home care. APC by Schneider Electric and Schneider Authorized Service are authorized to replace defective products or parts with new or refurbished ones; therefore, the replaced items become the exclusive property of APC by Schneider Electric.

The warranty does not cover:

- a. If the defect presented is caused by the misuse of the product by the consumer or third parties outside the manufacturer
- b. If the product is examined, altered, tampered with, tampered with, adjusted, corrupted or repaired by a person not authorized by the manufacturer.
- c. If the damage has been caused by accidents such as falls, agents of nature such as lightning, floods, landslides and other causes of force majeure or fortuitous events.
- d. If the purchase invoice has erasures or changes.

As it is a supplementary guarantee to the legal one (90 days), it is agreed that it will totally lose its validity, if one of the following hypotheses occurs:

- a. If the defect presented is caused by the misuse of the product by the consumer or third parties outside the manufacturer.
- b. If the product is examined, altered, tampered with, tampered with, adjusted, corrupted or repaired by a person not authorized by the manufacturer.
- c. If the damage has been caused by accidents such as falls, agents of nature such as lightning, floods, landslides and other causes of force majeure or fortuitous events.
- d. If the purchase invoice has erasures or changes.

Any defects caused by negligence, incompetence or imprudence of the consumer in complying with the instructions contained in its Installation Guide are excluded from this warranty.

Defects resulting from the use of the product outside the regular applications for which it was designed are also excluded from this warranty.

Worldwide Customer Support

For country specific customer support, visit our website www.apc.com