



by Schneider Electric

# User Manual Easy UPS On-Line External Battery Pack SRV120RLBP2-9A

## Important Safety Instructions

**SAVE THESE INSTRUCTIONS** - This manual contains important instructions that should be followed during installation and maintenance of the Battery pack.

Read the instructions carefully and look at the equipment to become familiar with the equipment before trying to install, operate, service or maintain it. The following special messages may appear throughout this manual 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 either 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 carrier and dealer if there is any damage.

### Read the Safety Guide before installing the Battery pack.

- Adhere to all national and local electrical codes.
- Changes and modifications to this unit not expressly approved by APC by Schneider Electric could void the warranty.
- This unit is intended only for indoor use in a controlled environment.
- Do not operate this unit in direct sunlight, in contact with fluids, or where there is excessive dust or humidity.
- Be sure the air vents on the unit are not blocked. Allow adequate space for proper ventilation.
- The equipment is heavy. Always practice safe lifting techniques adequate for the weight of the equipment.
- Always install the Battery pack at the bottom in rack-mount configurations. The Easy UPS must be installed above the Battery pack.
- Always recycle used batteries.
- Recycle the package materials or save them for reuse.

### Battery safety

- Servicing of user replaceable batteries should be performed or supervised by personnel knowledgeable about batteries and required precautions. In this case, batteries is not user replaceable.
- APC by Schneider Electric uses Sealed Maintenance Free Valve Regulated 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 a discharge of battery electrolyte. Released electrolyte is toxic and may be harmful to the skin and eyes.
- Use tool with insulated handles.
- Wear rubber gloves and boots.
- Determine if battery is either intentionally or inadvertently grounded. Contact with any part of a grounded battery can result in electric shock and 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.
- This equipment contains potentially hazardous voltages. Do not attempt to disassemble the unit. The unit contains no user serviceable parts. Repairs must be performed only by factory trained service personnel.

- When replacing batteries, replace with the same number and type of batteries as originally installed in the equipment.
- Batteries typically last for three to five years. Environmental factors impact battery life. Elevated ambient temperatures, frequent short duration discharges caused due to poor quality utility power will shorten battery life. Batteries should be replaced before end of life.
- Replace batteries immediately when the unit indicates battery replacement is necessary.
- CAUTION: Before installing or replacing the batteries, remove jewelry such as wristwatches and rings. High short circuit current 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.
- CAUTION: A battery can present a risk of electric shock and burns by high short-circuit current.
- CAUTION: Failed batteries can reach temperatures that exceed the burn thresholds for touchable surfaces

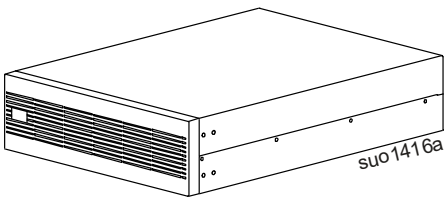

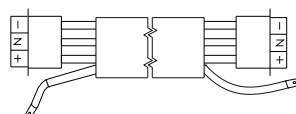
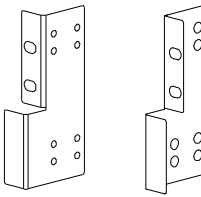

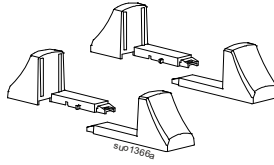
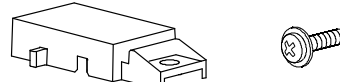
## Product Description

This Battery pack connects to selected APC by Schneider Electric uninterruptible power supply (UPS) models. The external battery pack provides continuous power to the connected load until utility power returns to normal levels or the batteries are fully discharged. The UPS and the Battery pack are packed separately.

This external battery pack is compatible with SRV10KUXI-IN, SRV15KUXI-IN and SRV20KUXI-IN UPS models only.

This user manual is available on the APC by Schneider Electric Web site, [www.apc.com](http://www.apc.com).

# Package Contents

<p>Battery pack</p>  <p>su01416a</p>	
<p>User documentation</p> 	<p>Battery cable (500 mm long)</p> 
<p>Rack-mount bracket x1 pair</p>  <p>Flat head screw x8</p> 	<p>Stabilizer bracket set x2 pairs</p>  <p>1U Foot extension x4 Pan head screw x8</p> 

**NOTE:**

The model and serial numbers are located on a rear panel label.

The packaging is recyclable; save it for reuse or dispose of it properly.

## Optional Accessories

For optional accessories, refer to the APC by Schneider Electric Web site, [www.apc.com](http://www.apc.com).

For additional specifications, refer to the APC by Schneider Electric Web site, [www.apc.com](http://www.apc.com).

# Specifications

## Environmental specifications

### NOTICE

#### RISK OF EQUIPMENT DAMAGE

- Battery pack must be used indoors only.
- The installation location should be sturdy to withstand the weight of the Battery pack.
- Do not operate the Battery pack where there is excessive dust or where the temperature or humidity are outside specified limits.
- Ensure the air vents on the Battery pack are not blocked. Allow adequate space for proper ventilation.

**Failure to follow these instructions can result in equipment damage.**

<b>Temperature</b>	<b>Operating</b>	0 to 40 °C
	<b>Storage</b>	-15 to 40 °C During storage, charge the Battery pack at least once in every six months.
<b>Elevation</b>	<b>Operating</b>	0 to 3,000 m: Normal operation
	<b>Storage</b>	0 to 15,000 m
<b>Humidity</b>		0% to 95% relative humidity, non-condensing
<b>International Protection Code</b>		IP 20

## Physical specifications

**NOTE:** The Battery pack is heavy. Follow all lifting guidelines.

<b>Unit dimensions with packaging Height x Width x Depth</b>	375 x 600 x 900 mm (14.76 x 23.62 x 35.43 in)
<b>Unit dimensions without packaging Height x Width x Depth</b>	131 x 438 x 686 mm (5.16 x 17.20 x 27.00 in)
<b>Unit weight batteries included, with packaging and pallet</b>	80 kg
<b>Unit weight batteries included, without packaging</b>	64kg

## Battery

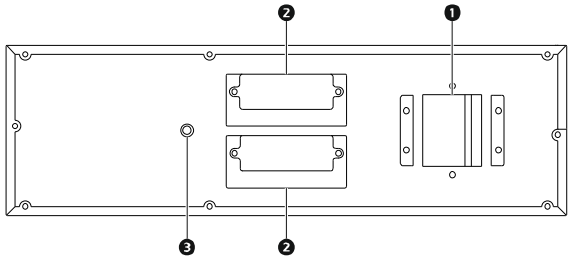
<b>Battery type</b>	Sealed maintenance free valve regulated lead acid battery, 12 V, 9 Ah
<b>Battery bank voltage</b>	±120 VDC

### Minimum number of battery packs to be connected

UPS Model	Minimum number of battery packs to be connected
SRV10KUXI-IN*	1
SRV15KUXI-IN	2
SRV20KUXI-IN	2

\* Use battery cable accessory SRV012 (to be purchased separately) for connecting the battery pack to SRV10KUXI-IN.

## Rear Panel Features



<b>1</b>	Circuit breaker
<b>2</b>	Battery connector
<b>3</b>	Ground screw

# Rack-Mount Installation

APC Rail Kit accessory SRVRK2 available for purchase, to enable the installation of the Battery pack in rack-mount configuration.



## CAUTION

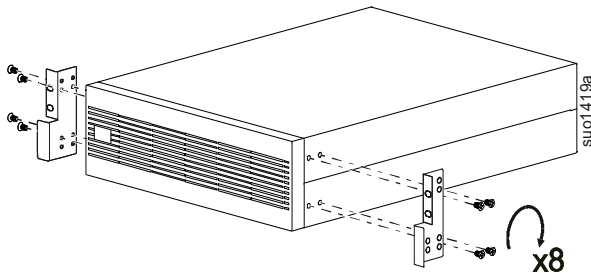
### RISK OF FALLING EQUIPMENT

- The equipment is heavy.
- Always practice safe lifting techniques adequate for the weight of the equipment.
- Always install the Battery pack at the bottom of the rack.
- Always install the Battery pack below the UPS in the rack.
- Given the heavy weight, the use of rack-mount brackets is mandatory during rack installation (guide with L shaped support).
- Always use the recommended number of screws to secure brackets to the Battery pack.
- Always use the recommended number of screws to secure the Battery pack to the rack.

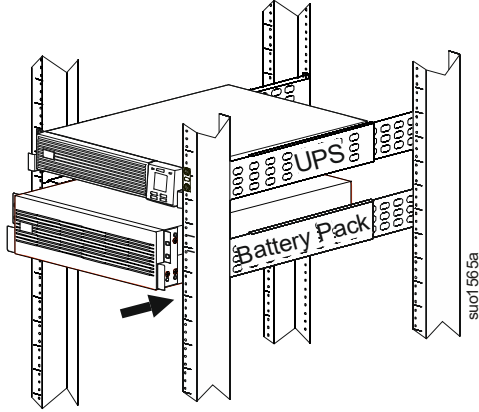
**Failure to follow these instructions can result in minor or moderate injury and equipment damage.**



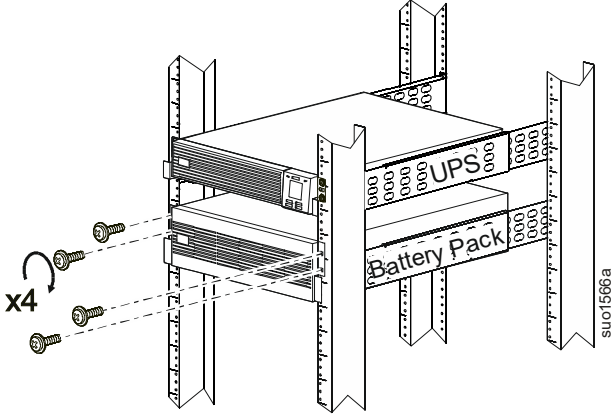
Secure two brackets to the Battery pack. Use 4 screws in each bracket.



- 2 Lift the battery module and slide it into rack enclosure.



- 3 Secure the battery module to the rack with screws, nuts and washers (not supplied in the package) through its mounting brackets into the rails.





# Tower Installation



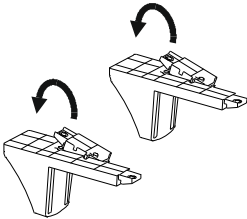
## CAUTION

### RISK OF FALLING EQUIPMENT

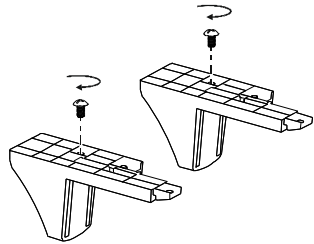
- The Battery pack is heavy.
- Always practice safe lifting techniques adequate for the weight of the equipment.
- Ensure that the stabilizer brackets are installed along with the Battery pack in tower installation.

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

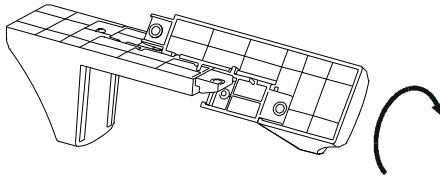
**1** Assemble the 1U extension pieces to the stabilizer brackets.



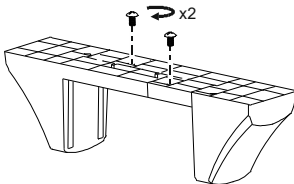
**2**



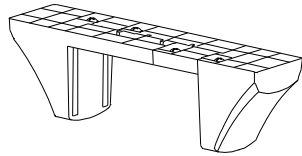
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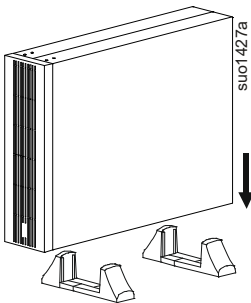
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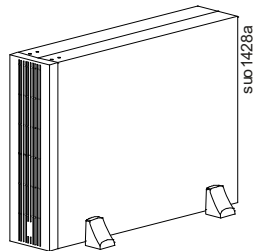
**5**



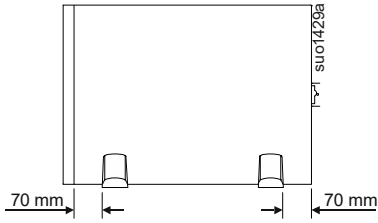
**6**



**7**



**NOTE:** Maintain approximately 70 mm distance from the edge of the unit, when installing the stabilizer brackets .



# Connect Battery Pack



## CAUTION

### RISK OF ELECTRIC SHOCK

- Identify the polarities of the battery terminals before connecting the battery. Be sure grounding (green cable) is connected firmly.
- Do not short the battery terminals.
- Do not wear jewelry when working with electrical equipment.

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



## 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, whichever is earlier.
- Replace the battery immediately when the UPS indicates battery replacement is necessary.
- 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 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.
- \*Replace all Battery packs which are older than one year, when installing additional Battery packs.

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

\* Contact APC by Schneider Electric Customer Support to determine the age of the installed Battery packs.

**NOTE:** For information on recycling batteries, go to APC by Schneider Electric Web site: [apc.com/recycle](http://apc.com/recycle).

## NOTICE

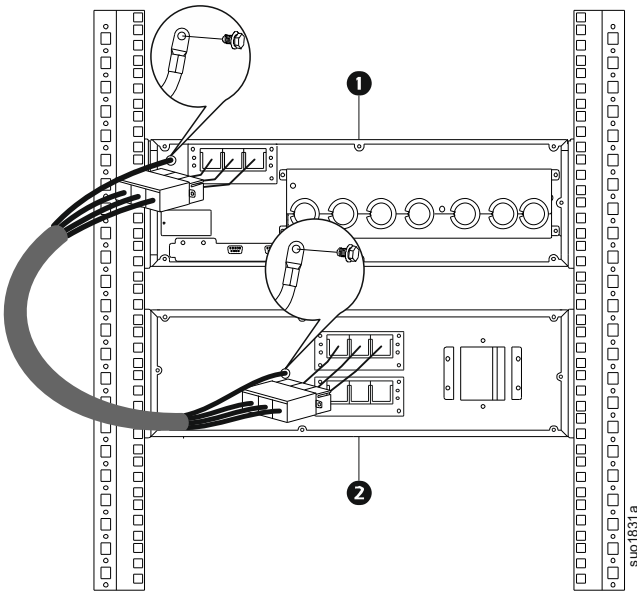
### RISK OF IMPROPER CONNECTION

Connect the battery according to the battery voltage indicated on the rear panel. If the connected battery voltage is incorrect, UPS may be damaged and cannot be repaired. Therefore, be sure to confirm that the battery voltage is in accordance with the UPS specification.

**Failure to follow these instructions could result in equipment damage.**

## Connect an external battery pack to the UPS

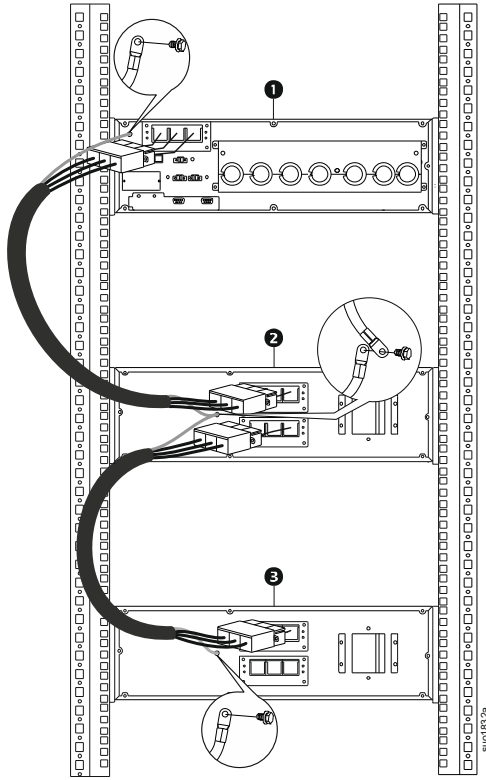
Connect UPS to an external Battery pack.



1	Easy UPS
2	Battery Pack

1. Locate the battery connector cover on rear panel of Easy UPS and Battery pack.
2. Remove the screws securing the cover and remove the cover.
3. Use the supplied battery connection cable.
4. Plug each end of the battery cable connector into the battery connector receptacle on the rear side of the Easy UPS and Battery pack.
5. Insert and tighten the screws removed in *step 2* to secure the battery connector receptacle to the battery connector.
6. Connect the ground wire to the ground terminal in the Easy UPS and Battery pack. Ground screw tightening torque 20 kgf.cm.

## Connect multiple Battery packs to Easy UPS .



❶	Easy UPS
❷	Battery Pack #1
❸	Battery Pack #2

1. Refer to “Connect an external battery pack to the UPS” on page 12 for connecting the Battery Pack #1 to the UPS.
2. Locate the battery connector receptacle covers on rear panel of Battery Pack #1 and Battery Pack #2.
3. Remove the screws securing the covers and remove the covers.
4. Use the supplied battery connection cable.
5. Plug each end of the battery cable connector into the battery connector receptacle on the rear side of the battery packs.
6. Insert and tighten the screws removed in *step 3* to secure the battery connector receptacle to the battery connector.
7. Connect the ground wire to the ground terminal in both Battery Pack #1 and Battery Pack #2. Ground screw tightening torque 20 kgf.cm.

**NOTE:** Be sure that the grounding wires are connected firmly.

# Troubleshooting

Problem and/or Possible Cause	Solution
<b>UPS is not supplying power to the connected equipment</b>	
The Battery pack is not connected.	Connect Battery pack to the UPS. Refer “Connect Battery Pack” on page 11 for details.
Low battery cut off. UPS may have discharged the battery due to utility power outage and turned the output off due to low battery condition.	Wait for the utility power to return and charge the battery.
<b>UPS is not providing expected backup time</b>	
The Battery pack is discharged due to a recent power outage.	The batteries require recharging after extended outages.
The Battery pack is near the end of its service life.	If the Battery pack is near the end of its service life, consider replacing the Battery pack, even if the replace battery indicator is not illuminated.

# Limited Factory Warranty

Schneider Electric IT Business India Private Ltd. (SEITBIPL), 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 SEITBIPL obligation under this warranty is limited to repairing or replacing, at its own sole option, any such defective products or parts there of. 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](http://warranty.apc.com) or by mailing in the completed warranty registration card that is included with the documentation.

SEITBIPL 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 SEITBIPL recommendations or specifications. Further, SEITBIPL 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. In no event shall SEITBIPL have any liability under this warranty for any product where the serial number has been altered, defaced, or removed, 7) normal wear resulting from frequent use.

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To obtain service under warranty you must call customer support. Customers with warranty claims issues may access the SEITBIPL worldwide customer support network through the SEITBIPL Web site: [www.apc.com](http://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**

<b>Internet</b>	<a href="http://www.apc.com/in">http://www.apc.com/in</a>
<b>Toll Free</b>	18001030011/18004194272
<b>E-mail</b>	<a href="mailto:indiainfo@se.com">indiainfo@se.com</a>