



User Manual

English

APC Smart-UPS[®] XL

SURT192RMXLBP2
SURT192XLBP2

Stack/Rack-Mount 6U
External Battery Pack

Introduction

About this unit

The American Power Conversion (APC®) SURT192RMXLBP2 external battery pack (XLBP) connects to an APC Smart-UPS® RT greater than 10 kVA. Together these units provide extended protection for electronic equipment from utility power blackouts, brownouts, sags and surges. The UPS and the XLBP together provide continuous power from the batteries until utility power returns to safe levels or the batteries are fully discharged.

Unpack package contents

Read the Safety Guide before installing the unit.

Inspect the unit upon receipt. Notify the carrier and dealer if there is damage.

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





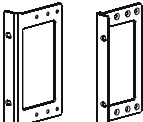


The unit is heavy. Remove the batteries from the cabinet prior to unpacking and installing the unit. Refer to battery removal instructions on the packaging.

Check the package contents:

<ul style="list-style-type: none"> • External battery pack • Front bezel • Ground wire • Four tie brackets • Sixteen ornamental screws 	<ul style="list-style-type: none"> • Literature kit containing: <ul style="list-style-type: none"> – Product documentation – Smart-UPS® RT User Manuals CD – Safety information – Warranty information 	<ul style="list-style-type: none"> • Rack-mount models also include: <ul style="list-style-type: none"> – Four ornamental screws – Eight flat head screws – Two cage nuts – Two rail cleats – Four pan head screws – Two rack-mount brackets
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NOTE: The model and serial numbers are located on a small, rear panel label. For some models, an additional label is located on the chassis under the front bezel.

Hardware


4		Rack-mount configuration: pan head screws for securing rail cleats to unit
8		Flat head screws for securing rack-mount brackets to units
20		Stack configuration: ornamental screws for securing tie brackets to units Rack-mount configuration: ornamental screws for securing units in rack
2		Rack-mount configuration: cage nuts for rack installation
2		Rack-mount brackets
2		Rail cleats
4		Stack configuration only: tie brackets for stabilizing units

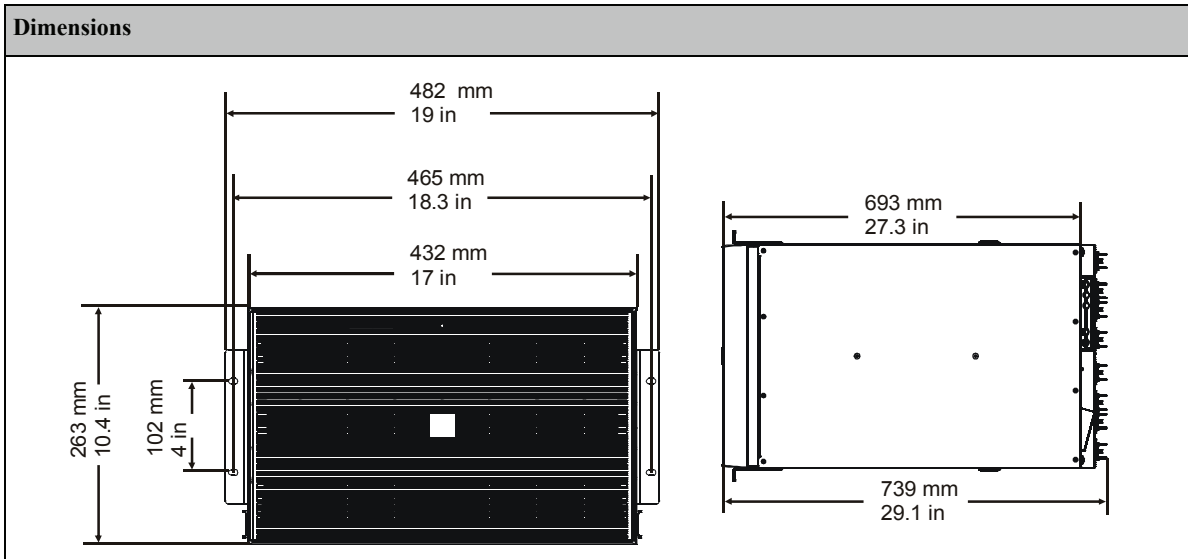
Specifications

Environmental Specifications

Temperature Operating Storage	32° to 104° F (0° to 40° C) 5° to 113° F (-15° to 45° C) charge the UPS battery every six months 86° to 158° F (30° to 70° C) charge the UPS battery every three months	This unit is intended for indoor use only. Select a location sturdy enough to handle the weight. Do not operate the UPS where there is excessive dust or the temperature or humidity are outside the specified limits. This unit has front to rear airflow. Allow adequate space for proper ventilation. Environmental factors impact battery life. High temperatures, poor utility power, and frequent, short duration discharges will shorten battery life.
Maximum Elevation Operating Storage	10,000 ft (3,000 m) 50,000 ft (15,240 m)	
Humidity	0 to 95% relative humidity, non-condensing	

Physical Specifications

Weight (unpacked)		
XLBP with eight battery modules	400 lbs (181 kg)	
Each battery module	38 lbs (17 kg)	



Installation

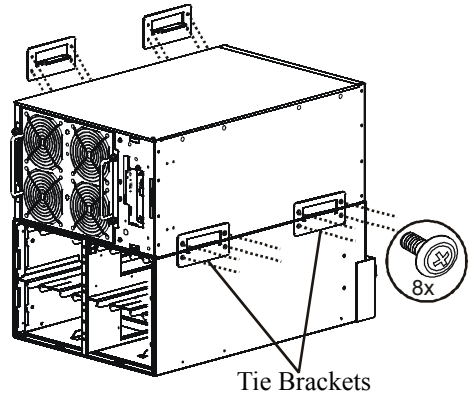
Stack configuration

Always place the UPS above the XLBP in a stack configuration.

Total stack configuration height is recommended NOT to exceed 18U. This is the equivalent of two XLBPs and one UPS.

Four screws must be used to secure each tie bracket to the units, (see diagram).

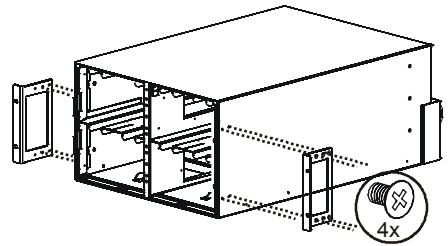
For detailed instructions on installing batteries, the battery doors, and bezels, refer to the *Rack-mount configuration* section of this manual.



Rack-mount configuration

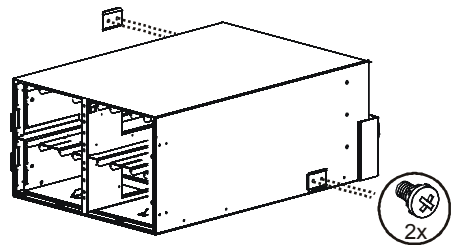
Install rack-mounting brackets

Four flat head screws must be used to secure each rack-mount bracket to the unit.



Install rail cleats

Two pan head screws must be used to secure each rail cleat to the unit.



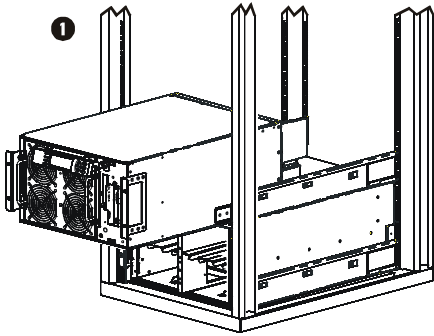
Install rails in rack.

For details on rail installation refer to the instructions included in the rail kit package.

Mount units in rack

The UPS and XLBP(s) should be installed at or near the bottom of the rack. Always place the UPS above the XLBP(s). Batteries must be removed from the XLBP(s) prior to installing the unit(s) in a rack. Refer to the instructions on the packaging for details on removing the batteries from the XLBP.

Install units in rack

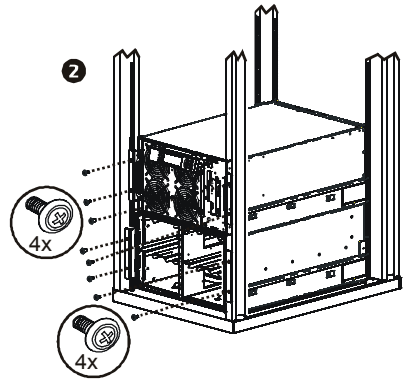
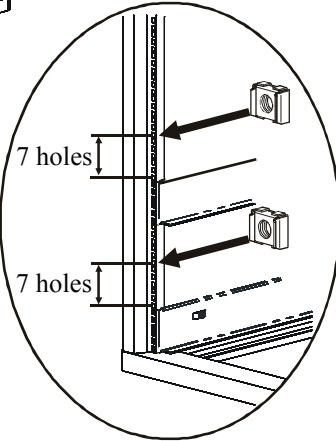


Secure the UPS and the XLBP in the rack using the cage nuts and ornamental screws included in the package.

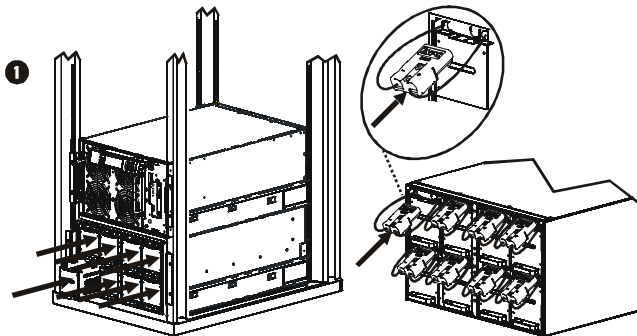
Four ornamental screws and two cage nuts must be used to secure each unit.

A cage nut must be used in the top hole of each rack-mount bracket when securing the unit in the rack.

The bottom hole of each rack-mount bracket can be secured using an ornamental screw in the threaded hole.



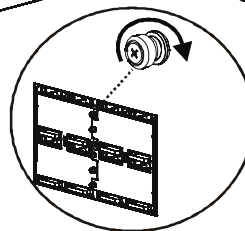
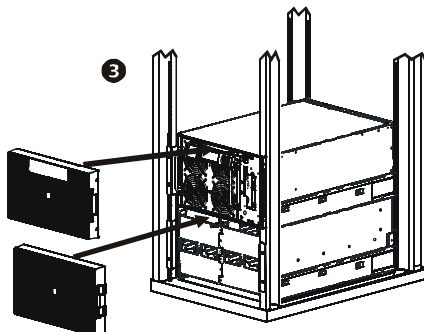
Install and connect battery modules, install bezels



**Connect all eight battery modules.
Failure to do so may cause equipment damage.**

Replace the battery doors.

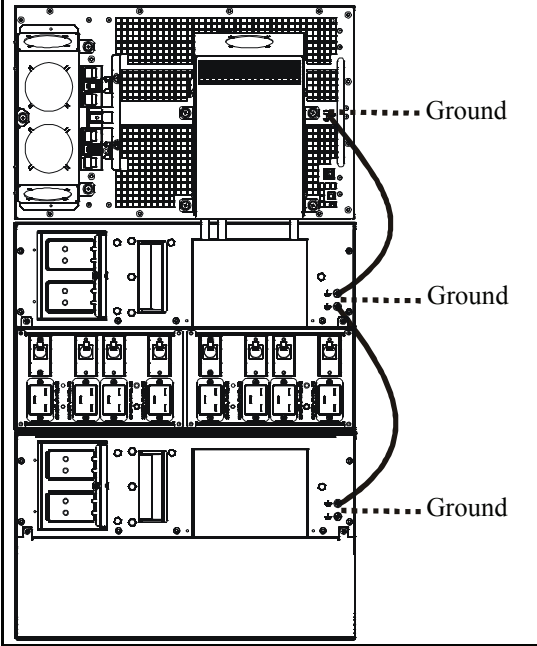
Tighten the screws to secure the battery doors.



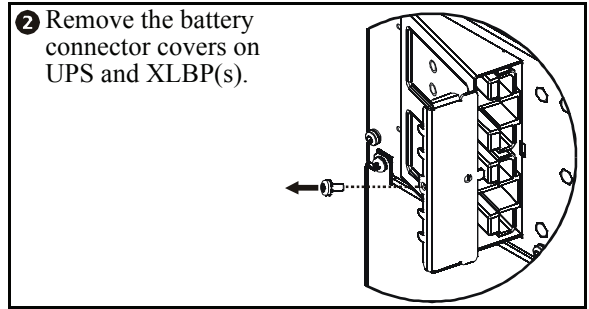
Install a bezel on the UPS and XLBP(s).

Connect UPS and XLBP(s)

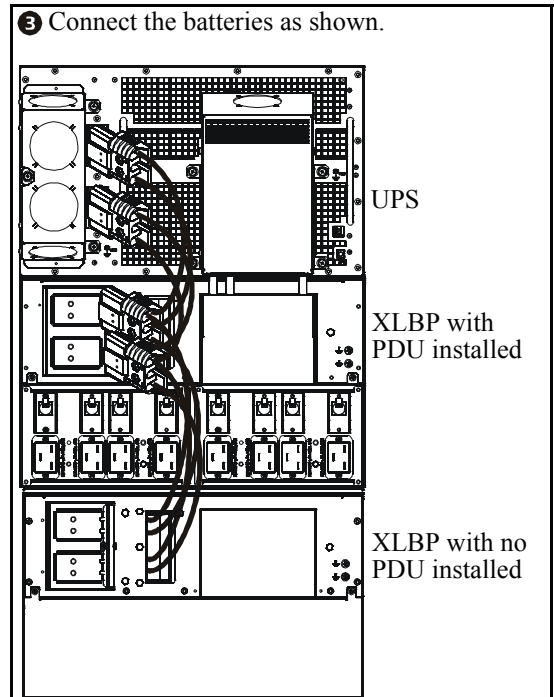
- 1** Connect the ground wires as shown. There are two ground connecting locations on each unit.



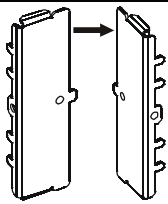
- 2** Remove the battery connector covers on UPS and XLBP(s).



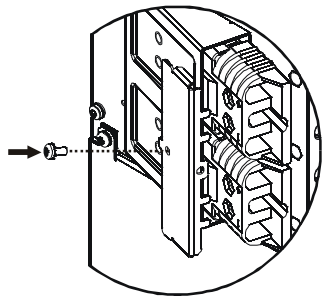
- 3** Connect the batteries as shown.



- 4** Rotate battery connector covers



- 5** Re-install the battery connector covers on UPS and XLBP(s).



Ensure that all battery connectors used and unused, have a battery connector cover installed.

Operation

Battery LED

The battery LED is located on the front bezel of the XLBP. During normal operation the LED is not illuminated.

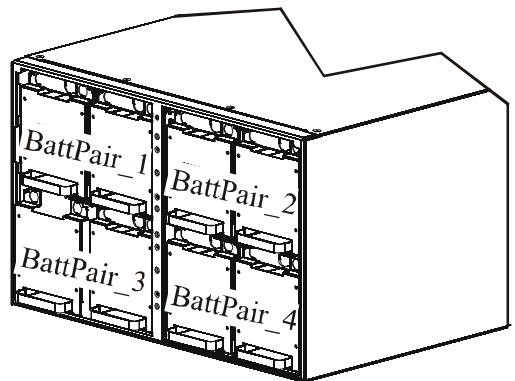
On start-up the XLBP LED may illuminate and blink within the first minute. The LED should then extinguish.

LED Activity	Possible Cause
<i>XLBP LED illuminates briefly</i>	
~ On start-up the XLBP LED may illuminate and blink within the first minute. ~ The XLBP is establishing communication with other components of the system. ~ The XLBP is conducting a normal periodic self test	Normal operation
<i>XLBP LED remains illuminated after start-up or illuminates during operation</i>	
XLBP LED is blinking slowly (one blink per second).	One or more battery modules are not connected
XLBP LED is blinking rapidly (three blinks per second).	A communication fault exists, check cable connections
The XLBP LED remains illuminated.	~ A potential hardware fault exists contact APC, refer to the <i>Service</i> section in this manual

Battery module and pair identification

The PowerView will reference XLBP configuration in the following manner.

External Battery Pack			
BattPair_1		BattPair_2	
Module_1	Module_2	Module_3	Module_4
BattPair_3		BattPair_4	
Module_5	Module_6	Module_7	Module_8



Maintenance and Service Information

Replace battery modules

This unit has easy-to-replace, hot-swappable battery modules. Replacement is a safe procedure, isolated from electrical hazards. You may leave the unit and connected equipment on during the replacement procedure.

Once the batteries are disconnected the connected equipment is not protected from power outages.

Refer to the appropriate replacement battery user manual for battery module installation instructions. See your dealer or contact APC at www.apc.com for information on replacement battery modules.



Be sure to deliver the spent battery(s) to a recycling facility or ship it to APC in the replacement battery packing material.

Service

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

1. Contact APC Customer Support through the APC Web site, www.apc.com.
 - Note the model number of the unit, the serial number located on the back of the unit, and the date purchased. If you call APC Customer Support, a technician will ask you to describe the problem and attempt to solve it over the phone. If this is not possible, the technician will issue a Returned Material Authorization Number (RMA#).
 - If the unit is under warranty, repairs are free.
 - Procedures for servicing or returning products may vary internationally. Refer to the APC Web site for country specific instructions.
2. Pack the unit in its original packaging. If this is not available:
 - Pack the unit carefully to avoid damage in transit. Never use Styrofoam beads for packaging.
 - Damage sustained in transit is not covered under warranty.
3. **Always DISCONNECT THE BATTERY(s) before shipping in compliance with U.S. Department of Transportation (DOT) and IATA regulations.** The battery(s) may remain in the unit.
4. Mark the RMA# on the outside of the package.
5. Return the unit by insured, prepaid carrier to the address given to you by Customer Support.

APC Worldwide Customer Support

Customer support for this or any other APC product is available at no charge in any of the following ways:

- Refer to the APC Web site to access documents in the APC Knowledge Base and to submit customer support requests.
 - www.apc.com (Corporate Headquarters)
Connect to localized APC Web sites for specific countries, each of which provides customer support information.
 - www.apc.com/support/
Global support searching APC Knowledge Base and using e-support.
- Contact an APC Customer Support center by telephone or e-mail.
Local, country-specific centers:
go to www.apc.com/support/contact for information.

Contact the APC representative or other distributor from whom you purchased your APC product for information on how to obtain local customer support.

Two-Year Warranty

The limited warranty provided by American Power Conversion (APC®) in this statement of Limited Factory Warranty applies only to products you purchase for your commercial or industrial use in the ordinary course of your business.

Terms of warranty

APC warrants its products to be free from defects in materials and workmanship for a period of two years from the date of purchase. The obligation of APC under this warranty is limited to repairing or replacing, at its sole discretion, any such defective products. This warranty does not apply to equipment that has been damaged by accident, negligence or misapplication or has been altered or modified in any way. Repair or replacement of a defective product or part thereof does not extend the original warranty period. Any parts furnished under this warranty may be new or factory-remanufactured.

Non-transferable warranty

This warranty extends only to the original purchaser who must have properly registered the product. The product may be registered at the APC Web site, www.apc.com.

Exclusions

APC 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 or testing. Further, APC shall not be liable under the warranty for unauthorized attempts to repair or modify wrong or inadequate electrical voltage or connection, inappropriate on-site operation conditions, corrosive atmosphere, repair, installation, start-up by non-APC designated personnel, a change in location or operating use, exposure to the elements, Acts of God, fire, theft, or installation contrary to APC recommendations or specifications or in any event if the APC serial number has been altered, defaced, or removed, or any other cause beyond the range of the intended use.

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Warranty claims

Customers with warranty claims issues may access the APC customer support network through the Support page of the APC Web site, www.apc.com. Select your country from the country selection pull-down menu. Open the Support tab at the top of the Web page to obtain contact information for customer support in your region.

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