



by Schneider Electric

Smart-UPS[®] Output Hardwire Kit

SURT 14/18 kVA 200 Vac

15/20 kVA 208/240 Vac Stack/RM 6U

Hardwire the UPS

Wiring Specifications

Input Connections	Output Connections
Utility Input Wire to L1, N/L2, ground	Hardwire Wire to L1, N/L2, ground
	PDU XL battery pack PDU to UPS: Wire L1, N/L2, ground

System	Wiring	Voltage	Current Full Load (maximum)	External Input Circuit Breaker (typical)	Wire Size (typical)*
SURT14K	Input	200 Vac	80 A	100 A / 2-pole	25 mm ² (2 AWG)
	Output	200 Vac	70 A	not required	25 mm ² (2 AWG)
SURT15K	Input	208/240 Vac	80 A	100 A / 2-pole	25 mm ² (2 AWG)
	Output	208/240 Vac	72 A	not required	25 mm ² (2 AWG)
SURT18K	Input	200 Vac	100 A	125 A / 2-pole	35 mm ² (1 AWG)
	Output	200 Vac	90 A	not required	35 mm ² (1 AWG)
SURT20K	Input	208/240 Vac	100 A	125 A / 2-pole	35 mm ² (1 AWG)
	Output	208/240 Vac	96 A	not required	35 mm ² (1 AWG)

Wire gauges may vary. Adhere to national and local electrical codes when wiring this unit.

* Terminal screw tightening torque: 40 lb-in (4.5 N-m)

Acceptable input frequency range is 40 to 70 Hz.

Output voltage and frequency are user selectable only when UPS is in **Load Disconnect** mode.

Refer to display interface menu screens for available options.

Output wiring

Wiring must be performed by a qualified electrician.

Adhere to all national and local electrical codes.



Failure to follow these instructions may result in personal injury or equipment damage.

Connect load to UPS

There are two ways to connect the load to the UPS.

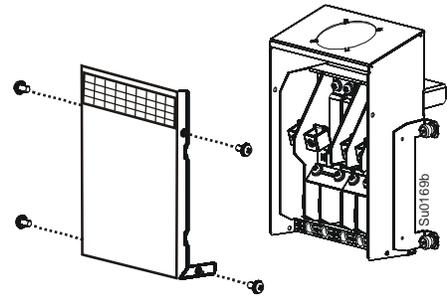
- Hardwire the load through the output wiring tray.
- Connect the load using the six output receptacles on the external battery pack.

Remove output wiring tray cover

Remove the screws that secure the cover and take the cover off the tray.

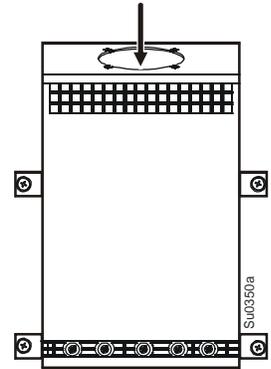
If hardwiring the load continue to the section below, **Hardwire the load**.

If connecting the load using the six output receptacles on the external battery pack, skip to “Install output wiring tray in UPS” on page 3.

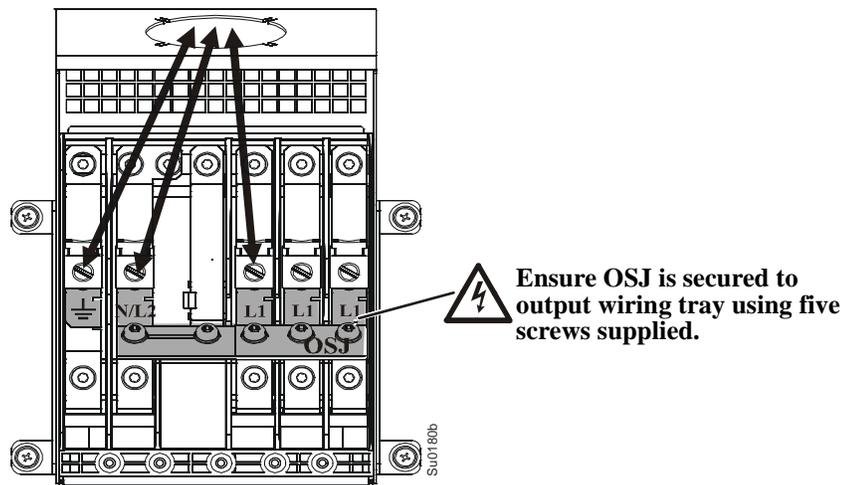


Hardwire the load

1. Remove appropriate circular knockout from output wiring tray.
2. Install appropriate strain relief (not supplied), for hardwire cables.



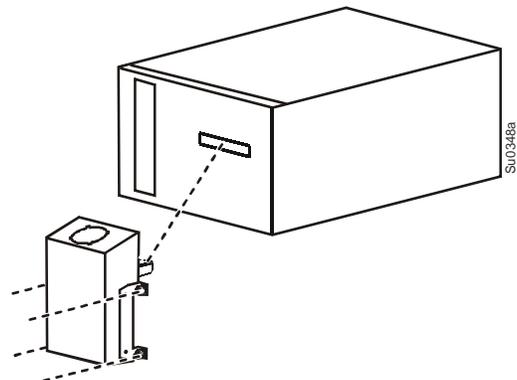
3. **Connect ground terminal first.** Then connect the remaining wires. Route wires through the knockout hole to the terminal blocks. See diagram below. Refer to “Wiring Specifications” on page 1.



Install output wiring tray in UPS

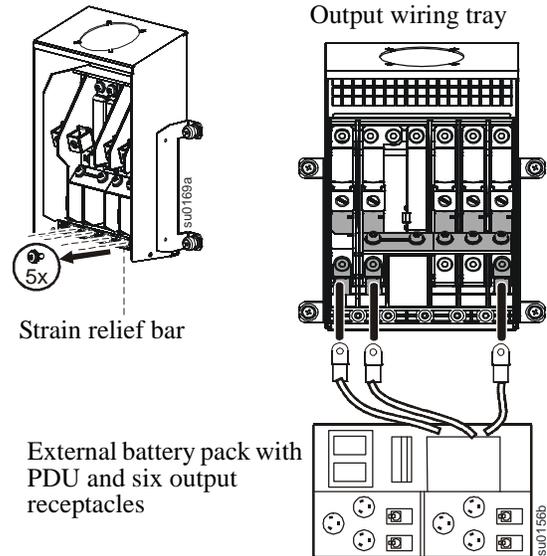
Insert the wiring tray into the appropriate slot on the UPS rear panel.

Tighten the screws to secure the tray to the UPS.



Connect PDU to output wiring tray

1. Remove the five screws securing the strain relief bar on the output wiring tray.
2. Connect the PDU on the external battery pack to the output wiring tray.
3. Replace the strain relief bar using the five screws removed in *step 1*.
4. Replace the covers using the screws removed previously.



Connect the load using external battery pack connectors

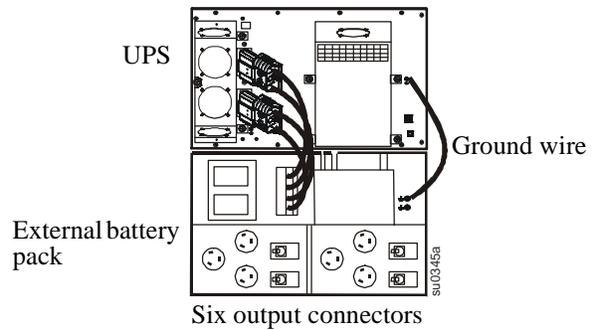
The PDU must be connected to the output wiring tray. Refer to “Connect PDU to output wiring tray” on page 4.

Connect the load to the UPS using the six output receptacles on the external battery pack. Connect the external battery pack to the UPS.

Connect the ground wire between the UPS and the external battery pack.

Connect the external battery pack to the UPS by plugging the external battery pack connectors into the UPS rear panel connectors.

Refer to the external battery pack user manual for details on removing and securing the battery connector safety covers.



Customer support and warranty information is available at the APC Web site, www.apc.com.

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