

## Smart-UPS RT

### **APC Smart-UPS RT 10,000VA 208V w/ (2) 208V to 120V Step-Down Transformer**

APC Smart-UPS RT, 8000 Watts / 10 kVA, Input 208V / Output 120V, 208V, Interface Port DB-9 RS-232, RJ-45 10/100 Base-T, Smart-Slot, Extended runtime model, Rack Height 12 U



**Includes:** CD with software, Service Manual, Smart UPS signalling RS-232 cable, User Manual, Web/SNMP Management Card

**Standard Lead Time:** Usually in Stock

# Smart-UPS RT Features & Benefits

## Availability

Automatic internal bypass	Supplies utility power to the connected loads in the event of a UPS overload condition or fault.
Scalable runtime	Allows additional run time to be quickly added as needed.
Intelligent Battery Management	Maximizes battery performance, life, and reliability through intelligent, precision charging.
Hot-swappable batteries	Ensures clean, uninterrupted power to protected equipment while batteries are being replaced
Automatic restart of loads after UPS shutdown	Automatically starts up the connected equipment upon the return of utility power.
Temperature-compensated battery charging	Prolongs battery life by regulating the charge voltage according to battery temperature.

## Manageability

Network manageable	Provides remote management of the UPS over the network.
InfraStruXure Manager Compatible	Enables centralized management via the APC InfraStruXure® Manager.
SmartSlot	Customize UPS capabilities with management cards.
LED status indicators	Quickly understand unit and power status with visual indicators.
Serial Connectivity	Provides management of the UPS via a serial port.

## Adaptability

Plug-and-Play external batteries	Ensures clean, uninterrupted power to the loads when adding extra runtime to the UPS.
Rack/Tower convertible	Protects the initial investment in the UPS when migrating from tower to rack-mount environment.
Flash-upgradeable firmware	Easy implementation of new firmware upgrades.

## Serviceability

User-replaceable batteries	Increases availability by allowing a trained user to perform upgrades and replacements of the batteries reducing Mean Time to Repair (MTTR)
Automatic self-test	Periodic battery self-test ensures early detection of a battery that needs to be replaced.
Predictive failure notification	Provides early-warning fault analysis ensuring proactive component replacement.
Disconnected battery notification	Warns when a battery is not available to provide backup power.
Audible Alarms	Actively let you know if the unit is on battery, if the battery is low or if there is an overload condition.

## Protection

Frequency and voltage regulation	Gives higher application availability by correcting poor frequency and voltage conditions without using the battery.
Power conditioning	Protects connected loads from surges, spikes, lightning, and other power disturbances.
Input power factor correction	Minimizes installation costs by enabling the use of smaller generators and cabling.
Generator Compatible	Ensures clean, uninterrupted power to the loads in the event of an extended

power outage

Cold-start capable

Provides temporary battery power when the utility power is out.

Resettable circuit  
breakers

Enables a quick recovery from overload events.

Safety-agency  
approved

Ensures the product has been tested and approved to work safely with the  
connected service provider equipment and within the specified environment.  
UL, FCC, CE, C-Tick approvals.

# Output

Output Power Capacity	8000 Watts / 10 kVA
Max Configurable Power	8000 Watts / 10 kVA
Nominal Output Voltage	120V,208V
Output Voltage Note	Configurable for 208 or 240 nominal output voltage
Output Voltage Distortion	Less than 3%
Output Frequency (sync to mains)	50/60 Hz +/- 3 Hz user adjustable +/- 0.1
Crest Factor	3 : 1
Waveform Type	Sine wave
Output Connections	(16) NEMA 5-20R
	(2) NEMA L14-30R
	(6) NEMA L6-20R
	(3) NEMA L6-30R
Bypass	Internal Bypass (Automatic and Manual)



# Input

Nominal Input Voltage	208V
Input Frequency	50/60 Hz +/- 5 Hz (auto sensing)
Input Connections	Hard Wire 3-wire (2PH + G)
Input voltage range for main operations	160 - 280V
Other Input Voltages	240

# Batteries & Runtime

Battery Type	Maintenance-free sealed Lead-Acid battery with suspended electrolyte : leakproof
Included Battery Modules	4
Typical recharge time	2.20 hour(s)
Replacement Battery	<a href="#">RBC44</a>
RBC™ Quantity	2
Typical Backup Time at Half Load	14.9 minutes (4000 Watts)

Typical Backup Time at Full Load	4.8 minutes (8000 Watts)
Runtime Chart	<a href="#">Smart-UPS RT</a>
Extended Run Options	<a href="#">APC Smart-UPS RT 10,000VA 208V w/ (2) 208V to 120V Step-Down Transformer</a>

## Communications & Management

Interface Port(s)	DB-9 RS-232,RJ-45 10/100 Base-T,Smart-Slot
Pre-Installed SmartSlot™ Cards	<a href="#">AP9619</a>
Control panel	LED status display with load and battery bar-graphs and On Line : On Battery : Replace Battery : Overload and Bypass Indicators
Audible Alarm	Alarm when on battery : distinctive low battery alarm : overload continuous tone alarm
Emergency Power Off (EPO)	Yes

## Surge Protection and Filtering

Filtering	Full time multi-pole noise filtering : 0.3% IEEE surge let-through : zero clamping response time : meets UL 1449
-----------	------------------------------------------------------------------------------------------------------------------

## Physical

Maximum Height	432.00 mm
Maximum Width	522.00 mm
Maximum Depth	736.00 mm
Rack Height	12U
Net Weight	224.55 KG
Shipping Weight	256.36 KG
Shipping Height	1247.00 mm
Shipping Width	597.00 mm
Shipping Depth	991.00 mm
Color	Black

## Environmental

Operating Environment	0 - 40 °C
Operating Relative Humidity	0%
Operating Elevation	0-3000 meters
Storage Temperature	-15 - 45 °C

Storage Relative Humidity	0%
Storage Elevation	0-15000 meters
Audible noise at 1 meter from surface of unit	55.00 dBA
Online Thermal Dissipation	2216.00 BTU/hr

## Conformance

Regulatory Approvals	CSA,FCC Part 15 Class A,UL 1778
Standard Warranty	2 years repair or replace

\*\*The time to recharge to 90% of full battery capacity following a discharge to shutdown using a load rated for 1/2 the full load rating of the UPS.

## Hardwiring

**Attention: Wiring must be performed by a qualified electrician.**

1. Install a utility circuit breaker in accordance with local electrical codes (see tables below) for input wiring only.
2. Switch the UPS input circuit breaker (see **A**) and utility circuit breakers OFF.
3. Remove the access panel (see **B**).
4. Remove circular knockouts.
5. Run wires through access panel to terminal blocks. Wire to ground block first. **Adhere to all national and local electrical codes.** (See tables and graphics.)
6. Use appropriate glands to achieve strain-relief on the hardwired input and output power cables.

XLT, XLJ, AND XLTW MODELS	
Input Connection	Output Connection (optional)
Wire to L1, L2, and $\oplus$ .	Wire to L1A, L2A, and $\oplus$ .

System	Wiring	Voltage	Current Full Load (Nominal)	External Input Circuit Breaker (typical)	Wire Size (typical)
SURT7500XLJ, SURT7500XLT, SURT7500XLTW	Input & Output	200/208/220V	40 amps <i>XLTW</i> - 38 amps	50 amps / 2-pole for Input Wiring Only	#8AWG/ 10mm <sup>2</sup>
SURT10000XLJ, SURT10000XLT, SURT10000XLTW	Input & Output	200/208/220V	54 amps <i>XLTW</i> -50 amps	70 amps / 2-pole for Input Wiring only	#6AWG/ 16mm <sup>2</sup>

XLI MODELS	
Input Connections	Output Connection (optional)
Single-Phase: Wire to L1, N, and $\oplus$ .	Wire to L1A, N1, and $\oplus$ .
Three-Phase: Wire to L1, L2, L3, N, and $\oplus$ .	

System	Wiring	Number of Phases	Voltage	Current Full Load (Nominal)	External Input Circuit Breaker (typical)	Wire Size (typical)
SURT7500XLI	Input	1	220/230/240V	38 amps	50 amps / 2-pole	10mm <sup>2</sup>
	Input	3+ Neutral	380/400/415V	14 amps / phase when online, 38 amps on L1 in bypass	50 amps / 4-pole	10mm <sup>2</sup>
	Output	1	220/230/240V	38 amps	(not required)	10mm <sup>2</sup>
SURT10000XLI	Input	1	220/230/240V	50 amps	63 amps / 2-pole	16mm <sup>2</sup>
	Input	3+ Neutral	380/400/415V	18 amps / phase when online, 50 amps on L1 in bypass	63 amps / 4-pole	16mm <sup>2</sup>
	Output	1	220/230/240V	50 amps	(not required)	16mm <sup>2</sup>