

APC™ single-phase, rack/tower convertible, double conversion on-line UPS with Lithium-ion batteries and remote management flexibility help you address challenges at the edge.







# A UPS developed for availability of your loads under unstable power conditions

Smart-UPS™ On-Line provides high-density, double-conversion, online power protection for servers, voice/data networks, medical labs and light industrial applications. The Smart-UPS On-Line has a rack/tower convertible chassis with Lithium-ion batteries that allow for greater performance at higher temperatures and increased lifecycle of the UPS. When business-critical systems require runtime in hours, not minutes, Smart-UPS On-Line can be configured with multiple Lithium-ion battery packs to meet your runtime demands.

The entire Smart-UPS On-Line family provides value to customers with demanding power conditions, including a very wide input voltage window, extremely tight output voltage regulation, frequency regulation, internal bypass and input power factor correction.

The included PowerChute™ Business Edition software provides unattended graceful shutdown of network operating systems.



## Save up to 58% on total cost of ownership with Smart-UPS On-Line Lithium-ion solutions

APC Smart-UPS with Lithium-ion technology enables IT professionals to operate effectively and lower Total Cost of Ownership (TCO) by minimizing UPS maintenance and offering remote UPS management across distributed environments.

Why should you consider Smart-UPS On-line Lithium-ion?



3X Longer life expectancy than VRLA batteries



Eliminate the cost of battery replacement, labor and maintenance



Save on TCO by up to 58%



One-third lighter batteries for easier handling and installation



Remote UPS management options



Five-year factory warranty on the UPS and battery



Battery management system and certifications provide higher level of performance



Greater efficiency in charge and discharge of the batteries

## Smart-UPS On-Line Lithium-ion UPS

Industry-leading power factor and Lithium-ion batteries maximizing UPS density 1000VA to 3000VA



#### **Features**

#### High power density

More real power in watts, 0.9 pf

#### Graphical LCD display

Intuitive interface with multicolor backlight.

#### Built-in energy meter

Measures energy use and displays UPS efficiency in operating modes for easy tracking.

#### Intelligent battery management system

Measures energy use and displays UPS efficiency in operating modes for easy tracking.

#### Lithium-ion battery pack

Longer battery life and performance at higher temperatures than VRLA. The flexibility to add up to 10 additional battery packs to expand runtime.

#### Operate without battery

Immediately protect equipment when power returns after a complete discharge of the battery.

## Smart-UPS On-Line Lithium-ion UPS

Proven performance with the world's largest installed base of single-phase, double-conversion products.

#### SRTL1500RMXLI



#### **Features**

### Optional network management card with environmental monitoring

Remote monitoring and control of the UPS and the environment via Ethernet connection.

#### Switched outlet group

Control a group of output load receptacles independent from the main UPS:

- · Cycling the entire UPS
- Sequenced turn ON/OFF
- Shedding of noncritical loads based on battery time, runtime remaining and overload
- Scheduled time OFF to conserve energy
- Rebooting hung device without cycling the entire UPS

#### Emergency power off

Shutoff UPS remotely in the event of a fire or other emergency. The UPS can accept normally open (NO) or normally closed (NC) contacts.

#### Flash upgradeable firmware

Allows for field updates of firmware via communication ports or Network Management Card (NMC).

#### Built-in automatic and manual bypass

Ensures seamless power to the load even when UPS functional failure is detected.

#### Communication ports

Options of Serial, USB, Ethernet and SmartSlot™ for network accessory cards.

#### Communication protocols

Choose from Modbus Serial, USB PowerSummary, HTTP, SNMP and Telnet.

## Smart-UPS On-Line display

Intuitive, easy-to-use LCD provides clear and accurate information in multiple languages





#### Backlit screens:

Amber: Indicates a condition that requires attention



#### Backlit screens:

Red: Indicates a UPS visible alarm that requires immediate attention

#### **Features**

#### LCD display screen

Clear, consistent and detailed information in your choice of basic or advanced menus.

#### Power status

- Operating mode and efficiency mode
- Load VA/watts/amps
- Input/output voltage and frequency
- · Battery capacity and runtime
- Energy meter

#### Control

UPS and outlet group settings, Bypass control

#### Configuration

- · Output voltage, frequency
- Language
- · Brightness, contrast
- Alarm volume
- IP address

#### Test and diagnostics

Initiate battery and runtime calibration tests

#### About

- UPS serial number, battery part number
- Battery install and suggested replacement dates

## Smart-UPS On-Line Lithium-ion Battery Pack

Long life, lighter weight, higher performance, high density



#### **Features**

#### Longer lifecycle

Double the life expectancy vs. sealed lead acid batteries

#### Lighter weight

1/3 lighter than sealed lead acid battery pack

#### High density

1U rack height allows more extended run capability in a smaller footprint.

#### Intelligent battery management system

Monitoring at the cell level to manage voltage helps Lithium-ion batteries provide a higher level of performance.

#### Certified Lithium-ion batteries

IEC62133, UL1973 (Sec 5.7 & 5.8), UN38.3

## Smart-UPS management solutions



PowerChute Business Edition

#### For graceful UPS shutdown

#### Built-in manageability for your UPS unit

PowerChute™ Business Edition software provides UPS management, system shutdown and innovative energy reporting capabilities. Energy usage, cost and CO2 reporting provides a greater understanding of the energy consumed by IT equipment, enabling improved energy efficiency. Advanced analysis features help to identify the causes of potential power-related problems before they occur, ensuring the health of your protected equipment.

# PowerChute NETWORK SRUTDOW

PowerChute Network Shutdown

#### For machine prioritization

#### Reliable, virtualized shutdown of multiple devices

PowerChute™ Network Shutdown Edition software provides UPS management, system shutdown and innovative energy reporting capabilities. Energy usage, cost and CO₂ reporting provides a greater understanding of the energy consumed by IT equipment, enabling improved energy efficiency. Advanced analysis features help to identify the causes of potential power-related problems before they occur, ensuring the health of your protected equipment.

#### PowerChute Business Edition features:

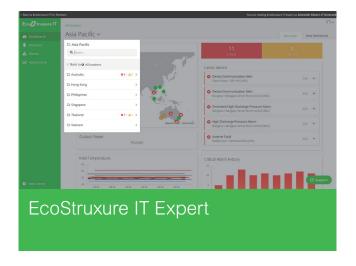
- · Graceful system shutdown
- · Error notifications
- · Risk-assessment reporting
- · Scheduled shutdowns
- · Energy-usage reporting
- Centralized monitoring
- · Recommended actions
- Battery status
- Outlet-aware shutdown
- · Event and data logging
- Power-event summary
- · Voltage analysis

#### PowerChute Network Shutdown features:

- Graceful network-based shutdown
- Sequenced server shutdown
- Integration with VMware and Microsoft Hyper-V
- Support for virtual clusters
- Migration / shutdown by virtual machine
- IPv6 support
- Virtual machine prioritization
- Command file integration
- · Redundant and parallel UPS support
- · Event logging
- · HTTPS communications
- Scalable architecture for host of client system

### EcoStruxure<sup>TM</sup> IT

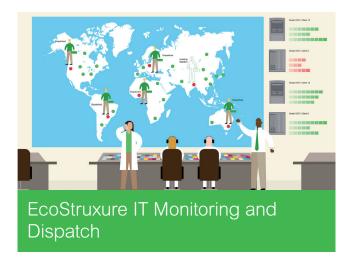
Secure monitoring and UPS fleet management.



#### The do-it-yourself advanced monitoring

We empower you to monitor and service customers on your own or provide EcoStruxure IT Expert to your customers who prefer a self-managed option.

Ideal for distributed IT sites and businesses with mixed IT environments.



#### We monitor and service

We provide monitoring and maintenance services on your behalf. Ideal for IT solution providers who want to add service without additional cost to your business model.



#### We advise, you maintain

We provide monitoring services, and you handle the maintenance. This option appeals most to partners who want to use their own on-site service.

## **UPS Network Management Cards**

For remote management and control





#### Connect to your network and enjoy direct control

APC UPS network management cards allow for secure connection and control of an individual APC UPS unit via web browser, command-line interface or SNMP. The configurable notification features keep you informed of problems as they occur. For protected servers, the included PowerChute network shutdown software provides graceful, unattended shutdown in the event of an extended power outage, keeping business information.

#### **UPS** management accessories

- AP9640: UPS Network Management Card
- AP9641: UPS Network Management Card with environmental monitoring
- AP9643: UPS Network Management Card with environmental monitoring and Modbus
- AP9834: APC USB Wi-Fi Device for wireless communication [compatible with AP9641 & AP9643 pre-installed or embedded]

#### Network management card features

- View the user interface with a browser for quick access from anywhere on a secure network.
- · Enable remote device management of your UPS by connecting it directly to the network.
- Get real-time error event notifications to quickly respond to critical situations, reducing repair time and maximizing uptime.
- Eliminate the need to dispatch technicians to remote locations by rebooting equipment remotely.

### **Smart-UPS Accessories**

#### Service bypass panels



SBP1500RMI: APC service bypass PDU, 230V; 10amp with (6) IEC C13



SBP3000RMI: APC service bypass PDU, 230V; 16amp with (6) IEC C13 and (1) C19



SBP3000RMHW: APC service bypass 100-240V; 16amp; Hardwire Input/Output

## Product family

#### SKU technical specifications



	SRTL1000RMXLI SRTL1000RMXLI-NC*	SRTL1500RMXLI SRTL1500RMXLI-NC*	SRTL2200RMXLI SRTL2200RMXLI-NC*	SRTL3000RMXLI SRTL3000RMXLI-NC*
Topology	Double Conversion On-Line			
Output				
Output power capacity	900 Watts / 1000 VA	1350 Watts / 1500 VA	1980 Watts / 2200 VA	2700 Watts / 3000 VA
Nominal output voltage	230V			
Output voltage distortion	Less than 1% at linear load (Full)			
Output frequency (sync to mains)	50/60 Hz +/- 3 Hz (auto sensing)			
Waveform type	Pure Sine Wave			
Output connections	(8) IEC320 C13 (6) IEC320 C13, (2) IEC320 C19			(2) IEC320 C10
Switched outlet groups	(0) 120		es (0) 120020 0 10	, (2) 120020 0 10
Efficiency at full load	>95%	>96%	>95%	>96%
•	29576	>90%	29570 29570	>9070
Input		0.0	2017	
Nominal input voltage	230V			
Input frequency	50/60 Hz +/- 3 Hz			
Input connections	IEC-60320 C14		IEC-60320 C20	
Input voltage range for main operations	160-275 VAC (±5V) (10V minimum hysteresis, ±1.5% max measurement accuracy)		160-275V (10V minimum hysteresis, ±1.5% max measurement accuracy)	
Batteries and runtime				
Battery type		Lithium-ion NMC che	emistry (LiNiMnCoO2)	
Runtime	64.2 mins 50% load, 32.6	31.8 mins 50% load, 21.8		
	mins 100% load	mins 100% load	28 mins 50% load,	21 mins 50% load,
			13 mins 100% load	9 mins 100% load
Additional external battery packs	up	to 5	up	to 10
Communications and management				
Interface port(s)		Serial (RJ45).	Smart-Slot, USB	
Available SmartSlot interface quantity	1			
Control panel	Multi-function LCD status and control console			
Audible alarms	Audible and visible alarms prioritized by severity			
Emergency Power Off (EPO)	Yes			
*Preinstalled Network Management Card	Included with "NC" suffix SKU			
-		included with	INC SUIIX SKU	
Physical				
UPS	05 1.420	In F00	05 420	
Net HxWxD	85mm x 432mm x 590mm		85mm x 432mm x 639mm	
Rack height	2U		2U	
Net weight	13.7kg		17.5kg	
Shipping weight	21kg		25kg	
Shipping HxWxD	245mm x 600mm x 810mm		245mm x 600mm x 870mm	
Color	Black, aluminum bezel			
Lithium-ion External Battery Pack				
Net HxWxD	43mm x 432mm x 521mm		43mm x 432mm x 521mm	
Rack height	1U		1U	
Net weight	13kg		13kg	
Shipping weight	16.4kg		16.4kg	
Shipping HxWxD	200mm x 600mm x 850mm		200mm x 600mm x 850mm	
Environmental				
Operating environment		32 – 104 °F	= (0 – 40 °C)	
Operating relative humidity	0 – 95%			
Operating elevation	0-10000 feet (0-3000 meters)			
Storage temperature	-15 to 45 °C (-30 to 70°C without batteries)			
Storage relative humidity	0 – 95%			
Storage elevation				
	0-50000 feet (0-15000 meters) 50.0dBA			
Audible noise at 1 meter from surface of unit		50.0	JUDA	
Conformance	.=			
Regulatory approvals		ec 5.7 & 5.8), UN38.3, IEC 62		
Standard warranty	Five	years on UPS and five years	on battery pack repair or re	place



apc.com/lithium-ion

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