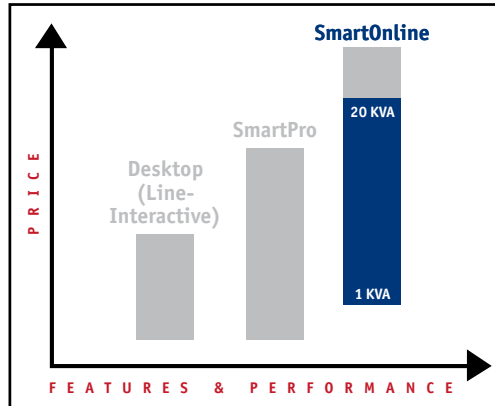


## SmartOnline True On-Line Rack/Tower UPS Systems



### TRUE ON-LINE

- ▶ 1 to 20 kVA
- ▶ Zero Transfer Time, Double Conversion
- ▶ Wide Input Voltage Range with Precision-Regulated Output
- ▶ Extended Runtime Options
- ▶ Automatic Internal Bypass
- ▶ Maintenance Bypass and Detachable PDU Options

### Deliver True On-Line, Pure Sine Wave, Zero Transfer Time Operation

SmartOnline Rackmount/Tower UPS Systems provide mission-critical equipment with the highest level of power protection. Double-conversion technology continually converts incoming AC power into filtered DC power, and then resynthesizes it back into AC power with a pure sine wave. Constant on-line operation completely isolates sensitive equipment from every power problem on the AC line. SmartOnline models accept the widest range of incoming voltage and frequency variations, delivering the most consistently pure, highly regulated power:  $\pm 2\%$  VAC.\*

\* Regulation is  $\pm 3\%$  VAC for SUINT2200RTL2UA.

SmartOnline Rackmount/Tower UPS Systems provide reliable battery power with zero transfer time to keep networks up and running through short blackouts and allow enough time to save data and shut down during longer ones. In addition, they stop damaging surges and filter disruptive line noise.

### Manage Multiple Servers

Using PowerAlert software, select models with multiple communication ports will simultaneously provide intelligent communications, shutdown commands and reporting on multiple servers—even if they are running different operating systems.\* Intelligent communications allow you to check UPS status (including battery charge level and runtime remaining) and AC power status as well as reboot switched outlet banks.

\* Additional PowerAlert features: pages 24-25.

### Control Individual Outlets

Switched outlet banks on select models can be controlled independently through PowerAlert. Use PowerAlert to reboot a locked-up computer by cycling the power on and off to select outlets on the UPS system. You can also program PowerAlert to shut down less important systems during an extended blackout, preserving battery runtime for critical equipment.

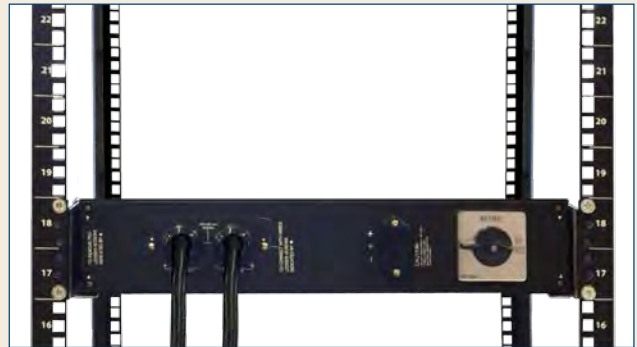
### Save Electricity and Reduce Costs

SmartOnline UPS Systems are up to 97% efficient in economy mode, a potential increase of 10% or more versus comparable on-line UPS systems. Economy mode can make your data center significantly cooler, greener and more cost-effective.


## Provide Maximum Availability with Hot-Swappable Design



*Hot-Swap the Power Module . . .*



*. . . Detachable Bypass PDU Continues Powering Equipment*

All SmartOnline Rackmount/Tower UPS Systems include an automatic internal bypass that ensures maximum availability of connected equipment by passing through utility power in the event of an internal fault or overload. Hot-swappable models include two additional features that ensure continuous availability: a modular design and detachable bypass PDU. When the bypass switch is set to "bypass", the power module can be removed for maintenance while the detachable bypass PDU remains installed, continuing to power connected equipment as long as utility power is present. Hot-swappable models are designated by the  symbol in the specifications chart.

## Adapt to Rack / Tower / Stack Applications

Adapt all models from rackmount to tower or stacking applications.

- Removable rack hardware
- Optional tower base stands (2-9USTAND)



*Single cabinet tower mount with optional base stands.*



*Multiple cabinet tower mount with optional base stands.*

## Extend Runtime


All models accept external battery packs to provide extended runtime. Without enough runtime, businesses stand to lose up to \$70,000 (USD) per hour according to a survey on the cost of lost productivity for an hour of network downtime.\*

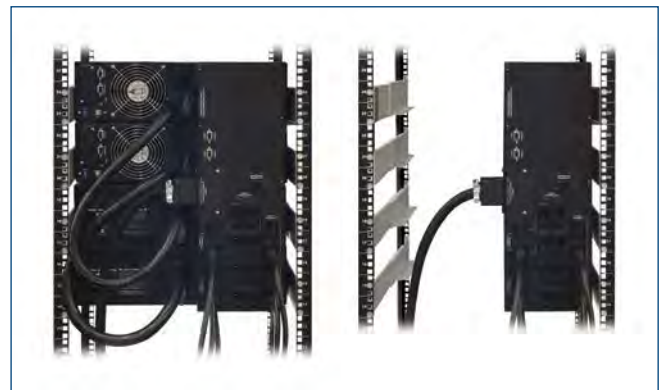


*Extending runtime is as simple as plugging in additional external battery packs.*

\* IDC.

## Provide Built-in N+1 Redundancy

Select models (designated by the  symbol in the specifications chart) include dual power modules for built-in N+1 redundancy. The power modules are hot-swappable, so they can be removed for maintenance, repair or replacement while the detachable bypass PDU powers equipment.



*Select models include dual hot-swappable power modules for built-in N+1 redundancy.*

## Display Operating Conditions

A front panel LED or LCD display alerts you to a variety of UPS conditions, including operating mode, load level and battery charge level. The easy-to-read interface provides more information than comparable models, allowing you to react to alerts before your systems are placed at risk.



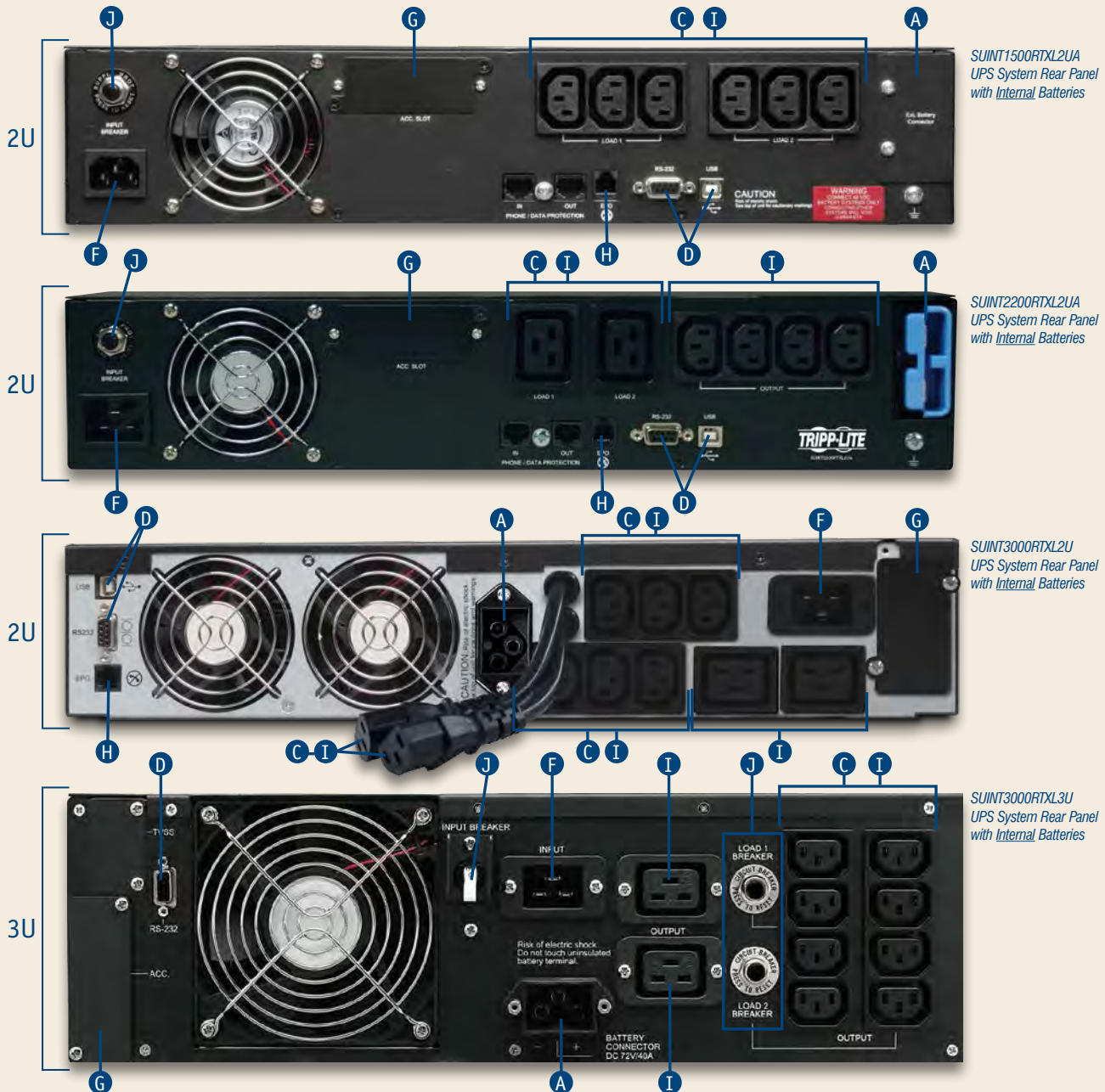
- A Extended Runtime Capability**  
All models feature connectors that accept optional external battery packs for additional runtime. External batteries can be "hot-swapped". Go to [www.tripplite.com/runtime](http://www.tripplite.com/runtime) for interactive runtime charts for every UPS model.
- B Detachable Bypass PDU**  
Passes through power to connected equipment if the power module is removed for maintenance, repair or replacement.
- C Switched Outlet Banks**  
Select models feature switched outlet banks that you can control independently through PowerAlert software.
- D Communication Ports**  
Built-in USB and/or serial ports simultaneously provide shutdown commands and reporting on multiple servers.
- E Bypass Operation**  
A bypass switch allows the power module to be removed for maintenance, repair or replacement while continuously passing through utility power to connected equipment.
- F AC Input Connector**  
C14 or C20 inlet (depending on model) connects to a user-supplied cord and plug compatible with local AC outlets.



- G Accessory Card Slot**  
Accepts optional internal SNMPWEBCARD or RELAYIOCARD. SNMPWEBCARD provides network interface for monitoring and control via SNMP, Web, SSH or telnet, enabling remote reboots, shutdowns and more. Use with optional ENVIROSENSE to monitor temperature and humidity. RELAYIOCARD provides a programmable contact closure interface with 6 outputs and 1 input.
- H Emergency Power Off**  
A jack included with select models allows remote emergency shutdown.
- I Flexible Output Options**  
C13 and/or C19 outlets on select models ensure maximum compatibility with equipment worldwide.
- J Short Circuit Protection**  
Circuit breakers guard against short circuits and overloads.
- K Hardwire Input**  
**Front Panel Battery Replacement (Not Shown)**  
1000 to 3000 VA models feature a convenient front-panel battery access.\* All models allow "hot-swap" battery replacement.  
\*Tripp Lite offers a complete line of replacement battery cartridges (R.B.C.) at [www.tripplite.com](http://www.tripplite.com).



## Standard Models Maximum Availability Features: Internal Bypass • Hot-Swappable Batteries



**Hot-Swappable Modular Models** Maximum Availability Features:  
 Internal Bypass • Detachable Bypass PDU • Hot-Swappable Power Module • Hot-Swappable Batteries



## Specifications



Model	Output Capacity	Typical Half-Load Runtime <sup>(1)</sup>	Extended Runtime	Total Rack Size	Input Voltage Range <sup>(2)</sup>	Nominal Output Voltage (50/60 Hz)	Output Voltage Regulation	AC Outlet Quantity (Type) [Switched Outlet Banks]	USB Ports	DB9 Serial Ports <sup>(3)</sup>	AC Input Connector
<b>SmartOnline Rack/Tower UPS Systems</b>											
<b>SUINT1000RTL2UA</b>	1 kVA/0,8 kW	12+ min.	<b>A</b>	2U	130-275	230 (200/220/230/240)	±2%	6 (C13)	1	1	C14 inlet
<b>SUINT1500RTL2UA</b>	1,5 kVA/1,2 kW	12+ min.	<b>B</b>	2U	130-275	230 (200/220/230/240)	±2%	6 (C13) [2x3]	1	1	C14 inlet
<b>SUINT2200RTL2UA</b>	2,2 kVA/1,6 kW	14+ min.	<b>B</b>	2U	130-275	230 (200/220/230/240)	±3%	4 (C13) + 2 (C19) [2x1]	1	1	C20 inlet
<b>SUINT3000RTL2U</b>	3 kVA/2,5 kW	15+ min.	<b>C</b>	2U	120-288	230 (200/208/220/230/240)	±2%	8 (C13) + 2 (C19) [2x4]	1	1	C20 inlet
<b>SUINT3000RTL3U</b>	3 kVA/2,4 kW	14+ min.	<b>C</b>	3U	130-275	230 (200/220/230/240)	±2%	8 (C13) + 2 (C19) [2x4]	–	1	C20 inlet
<b>SU6000RT3UHV</b>	6 kVA/4,2 kW	20+ min.	<b>E</b>	6U	156-276	230 (200/208/220/230/240)	±2%	Hardwire	–	2	Hardwire
<b>SU6000RT3UHVXL</b>	6 kVA/4,2 kW	30+ min.	<b>E</b>	6U	156-276	230 (200/208/220/230/240)	±2%	Hardwire	–	2	Hardwire
<b>SmartOnline Hot-Swappable Rack/Tower UPS Systems</b>											
<b>SU6000RT4UHV</b>	6 kVA/5,4 kW	8,5+ min.	<b>D</b>	4U	100-300	230 (200/208/220/230/240)	±2%	4 (C19)	1	1	Hardwire
<b>SU6000RT4UHVHW</b>	6 kVA/5,4 kW	8,5+ min.	<b>D</b>	4U	100-300	230 (200/208/220/230/240)	±2%	Hardwire	1	1	Hardwire
<b>SU8000RT3UG</b>	8 kVA/7,2 kW	13,5+ min.	<b>E</b>	6U	100-300	230 (200/208/220/230/240)	±2%	6 (C19)	1	1	Hardwire
<b>SU8000RT3UHW</b>	8 kVA/7,2 kW	13,5+ min.	<b>E</b>	6U	100-300	230 (200/208/220/230/240)	±2%	Hardwire	1	1	Hardwire
<b>SU10KRT3UHV</b>	10 kVA/9 kW	12,5+ min.	<b>E</b>	6U	100-300	230 (200/208/220/230/240)	±2%	Hardwire	1	1	Hardwire
<b>SU10000RT3UG</b>	10 kVA/9 kW	12,5+ min.	<b>E</b>	6U	100-300	230 (200/208/220/230/240)	±2%	6 (C19)	1	1	Hardwire
<b>SmartOnline Hot-Swappable Rack/Tower UPS Systems with Dual Power Modules (Provide N+1 redundancy when load is 50% or less.)</b>											
<b>SU12KRT4UHW</b>	12 kVA/10,8 kW	8,5+ min.	<b>E</b>	8U	100-300	230 (200/208/220/230/240)	±2%	Hardwire	1	1	Hardwire
<b>SU16KRTG</b>	16 kVA/14,4 kW	13,5+ min.	<b>E</b>	12U	100-300	230 (200/208/220/230/240)	±2%	8 (C19)	1	1	Hardwire
<b>SU16KRTHW</b>	16 kVA/14,4 kW	13,5+ min.	<b>E</b>	12U	100-300	230 (200/208/220/230/240)	±2%	Hardwire	1	1	Hardwire
<b>SU20KRTG</b>	20 kVA/18 kW	12,5+ min.	<b>E</b>	12U	100-300	230 (200/208/220/230/240)	±2%	8 (C19)	1	1	Hardwire
<b>SU20KRTHW</b>	20 kVA/18 kW	12,5+ min.	<b>E</b>	12U	100-300	230 (200/208/220/230/240)	±2%	Hardwire	1	1	Hardwire
<b>SmartOnline Rack/Tower UPS System with 3-Phase Input and Single-Phase Output (Includes SNMP card and supports parallel configuration of up to 4 units.)</b>											
<b>SU10KRT3/1X</b>	10 kVA/7 kW	14+ min.	<b>E</b>	6U	277-485 (3-phase)	230 (200/220/230/240)	±2%	Hardwire	–	1	Hardwire

Certifications vary by model. All models include an accessory card slot. **(1)** Runtime varies with load, battery condition and other factors. **(2)** Input voltage range varies with load. **(3)** Select DB9 ports support contact-closure communications.

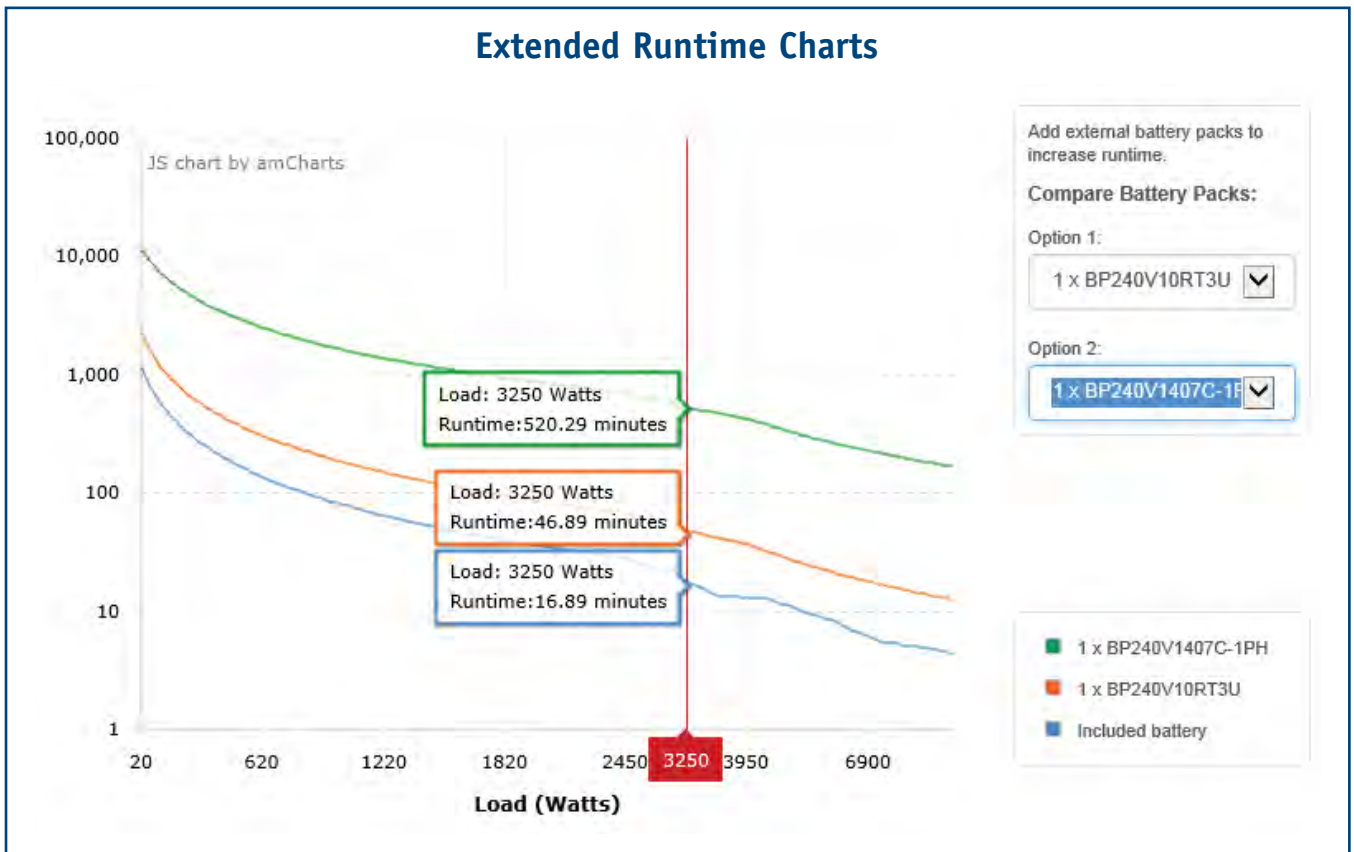
Model with expandable runtime. Model with LCD. Model with hot-swappable power module(s). Model with built-in N+1 redundancy.

Visit [www.tripplite.com/smartonline](http://www.tripplite.com/smartonline) for the latest specifications, including weights and dimensions.

# Specifications



Model	Description
<b>Optional External Battery Packs</b>	
<b>A BP24V15RT2U</b>	24V external battery pack and cable. Red and black 2-pole connector. 2U rack/tower cabinet. Not expandable.
<b>A BP24V28-2U</b>	24V external battery pack and cable. Red and black 2-pole connector. 2U rack/tower cabinet. Not expandable.
<b>A BP24V36-2US</b>	24V external battery pack and cable. Red and black 2-pole connector. 2U rack/tower cabinet. Expandable via daisy chain.
<b>A BP24V70-3U</b>	24V external battery pack and cable. Red and black 2-pole connector. 3U rack/tower cabinet. Expandable via daisy chain.
<b>B BP48V24-2U</b>	48V external battery pack and cable. Blue 2-pole connector. 2U rack/tower cabinet. Not expandable.
<b>B BP48V27-2US</b>	48V external battery pack and cable. Blue 2-pole connector. 2U rack/tower cabinet. Expandable via daisy chain.
<b>B BP48V60RT-3U</b>	48V external battery pack and cable. Blue 2-pole connector. 3U rack/tower cabinet. Expandable via daisy chain.
<b>C BP72V15-2U</b>	72V external battery pack and cable. Black 3-pole connector. 2U rack/tower cabinet. Not expandable.
<b>C BP72V18-2US</b>	72V external battery pack and cable. Black 3-pole connector. 2U rack/tower cabinet. Expandable via daisy chain.
<b>C BP72V28RT-3U</b>	72V external battery pack and cable. Black 3-pole connector. 3U rack/tower cabinet. Expandable via daisy chain.
<b>D BP192V12-3U</b>	192V external battery pack and cable. Black 3-pole connector. 3U rack/tower cabinet. Expandable via daisy chain.
<b>E BP240V10RT3U</b>	240V external battery pack and cable. Black 3-pole connector. 3U rack/tower cabinet. Expandable via daisy chain.
<b>Additional Accessories</b>	
<b>2-9USTAND</b>	Base stand kit adapts UPS systems for tower installation. Adjusts from 2U to 9U. Two kits adjust from 10U to 14U. Included with select UPS models.
<b>2POSTRMKITHD</b>	Heavy-duty 2-post rack mounting kit for 2U to 4U UPS cabinets. Order one kit per cabinet.
<b>ENVIROSENSE</b>	Connects to SNMPWEBCARD for remote temperature and humidity monitoring. Also monitors and controls contact-closure devices.
<b>MODBUSCARD</b>	Accessory card adds interface for MODBUS RTU industrial communications protocol, RS-422/485 and RS-232.
<b>RELAYIOCARD</b>	Accessory card adds programmable contact-closure interface. Includes six outputs and one input.
<b>RELAYIOMINI</b>	Miniature accessory card adds contact-closure port (DB9) to select UPS systems. Replaces USB port.
<b>SNMPWEBCARD</b>	Adds network interface to UPS systems for remote management via SNMP, Web, SSH or telnet, including free PowerAlert software.



Go to [www.tripplite.com/runtime](http://www.tripplite.com/runtime) for interactive battery backup runtime charts for every UPS model.