UPS SYSTEMS





Enter





Tripp Lite UPS Systems

The most reliable and cost-efficient solutions available for protecting and supporting critical systems in any environment.













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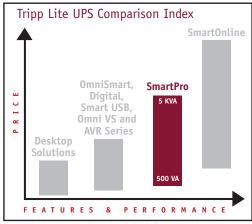
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SmartPro® Intelligent Line-Interactive UPS Systems





- ▶ 500 5,000 VA
- ▶ Internal Batteries & Extended Runtime Options
- Automatic Voltage Regulation (AVR)
- Rack/Tower/Stack Adaptable

Conserve Space—Slim as 1U!

SmartPro Rackmount/Tower UPS Systems provide more battery backup (up to 5000VA) and premium product features in compact cases (as slim as 1U) which make the best use of available rack space. Select models are compact and shallow enough to allow users to mount a UPS system and an external battery pack back-to-back to increase the power protection in the same rack space.



Kraft Foods Alane Watkins, Systems Administrator

Protect Every Application

SmartPro Rackmount/Tower UPS Systems are available in a wide variety of capacities to protect every size computer application from downtime, damage and data loss due to power problems. SmartPro Rackmount/Tower UPS Systems provide complete protection against all types of power problems, including brownouts, blackouts, surges and line noise. Line-interactive operation—also known as automatic voltage regulation (AVR) automatically regulates incoming voltage to keep equipment working through low voltage (brownouts) and high voltage conditions* indefinitely, without draining battery power. SmartPro Rackmount/Tower UPS Systems provide reliable battery power to keep computers up and running through short blackouts and allow enough time to safely shut down during longer ones. In addition, all AC outlets are backed by internal surge suppression and line noise filtering components to protect equipment from damage due to lightning and surges or audio/video distortion due to line noise.

* SMART500RT1U models supply battery power during high voltage conditions.





Extend Runtime

Select models accept external battery packs to provide extended runtime. Without enough runtime, businesses stand to lose up to \$50,000 per hour according to a recent survey on the cost of lost productivity for an hour of network downtime.* Locate your planned load and optimum runtime on the chart to the right.

^{*} Yankee Group.



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

Adapt to Rack/ Tower/Stack Applications

Adapt all models from rackmount to tower or stacking applications.*

- Removable rack hardware
- Optional base stands



SMART3000RM2U tower mount with optional base stands.

		Runtime (m	inutes) with ad	lditional exter	nal battery pa	ack(s)
Load	Runtime (minutes) with	Non-Expandable	Expa	ndable Battery	/ Pack(s)*	
(Watts)	included batteries	Battery Pack	1	3	3 4	
SMART750	RMXL2U Extended Runtime	BP24V28-2U		BP24V	70-3U	
200	41.2	179.7	437.3	866.9	1285.9	1692.
440	16.0	72.6	187.3	389.3	592.9	795.0
SMART150	ORMXL2Ua Extended Runtime	BP36V15-2U		BP36V	42-3U	
500	25.0	74.6	205.9	420.6	636.3	850.1
1000	10.0	29.7	86.5	185.2	288.1	392.3
SMART220	ORMXL2U Extended Runtime	BP48V24-2U		BP48V	60RT3U	
800	16.0	62.0	128.5	264.3	403.4	542.9
1600	6.0	24.5	52.6	113.0	177.3	243.5
SMART260	ORM2U Extended Runtime	BP48V24-2U		BP48V6	ORT3U	
800	21.2	59.9	124.3	256.2	391.5	527.2
1600	8.5	24.9	53.4	114.5	179.7	246.6
SMART300	ORM2U Extended Runtime	BP48V24-2U		BP48V	60RT3U	
800	21.2	59.9	124.3	256.2	391.5	527.2
1600	8.5	24.9	53.4	114.5	179.7	246.6
SMART300	ORMOD2U Extended Runtime	BP72V15-2U		BP72V2	28RT-3U	
1440	11.0	33.0	97.0	166.0	238.0	311.
2880	3.8	13.0	39.0	69.0	102.0	135.
SMART5000	ORT3U Extended Runtime			BP48V	60RT3U	
2000	38.0	N/A	79.1	129.5	181.9	235.3
4000	15.0	N/A	32.6	54.5	78.0	102.6
SMART500	OXFMRXL Extended Runtime			BP48V	60RT3U	
1820	27.7	N/A	63.0	117.9	175.8	235.2
3750	10.0	N/A	24.4	47.0	71.7	97.6
* Battery packs	that are "expandable" can be connected to	ogether for increased runtin	те.			

For additional extended runtime solutions to fit your specific load requirements, use Tripp Lite's interactive UPS Selector Guide at www.tripplite.com/selector/ups, or call Tripp Lite's Application Specialists at (773) 869-1236.

Manage Multiple Servers

Multiple built-in communication ports provide the ability to simultaneously manage multiple servers without the need for accessories. 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 AC power status as well as reboot Customized Load Management Banks.

Protect Telecom Applications

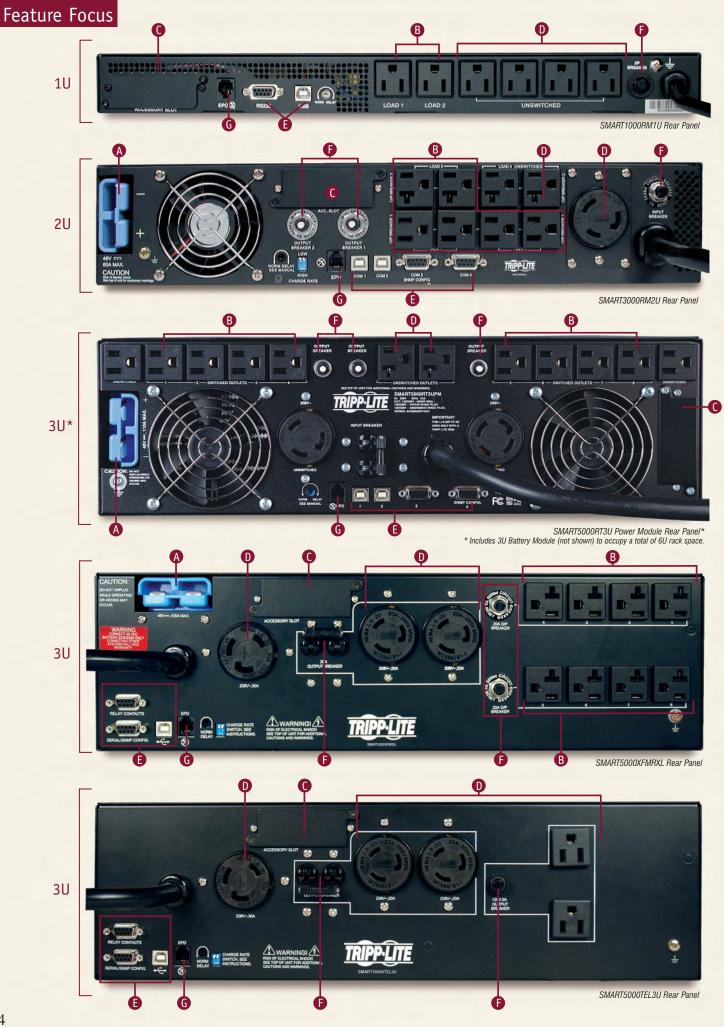
Protect large telecom equipment and servers with a specially designed SmartPro Rackmount/Tower UPS System—SMART5000TEL3U. The SMART5000TEL3U allows you to power and protect multiple pieces of high-voltage equipment from a single 208V circuit. In addition, the SMART5000TEL3U features two 120V receptacles which supply enough support to low-powered monitors and peripherals used with high-voltage equipment.

Control Individual Outlets

Prioritize the uptime of mission-critical loads during a power failure with Customized Load Management Banks featured on select models. Customized Load Management Banks can be controlled independently through PowerAlert. Use PowerAlert to reboot a locked-up computer by cycling the power on and off to select receptacles on the UPS system. You can also program PowerAlert to shut down less important systems during an extended blackout, preserving battery runtime for more critical equipment.

^{* 1}U models include hardware to adapt to tower mounting. Optional base stands (model: 2-9USTAND) are available to adapt any combination of models, from 2U to 9U wide, to tower mounting.

^{*} Additional PowerAlert features: pages 26 and 27.



A Extended Runtime Capability



Select models feature connectors interest that accept optional external SNM battery packs for additional or R runtime. External batteries can be "hot-swapped". See Extended interest can be interest.

"hot-swapped". See Extended Runtime Chart on page 3 to locate the perfect SmartPro Rackmount/Tower model that fits your runtime needs.

Customized Load Management

Prioritize the uptime of mission-critical loads during a power failure. Select models feature special load banks that you control independently through PowerAlert software. Use PowerAlert to reboot a locked-up computer or to shut down less important systems during extended blackouts, preserving battery runtime for more critical equipment.



Accepts optional internal SNMPWEBCARD or RELAYIOCARD.



SNMPWEBCARD provides network interface for monitoring and control via SNMP, Web or telnet, enabling remote reboots, shutdowns and more. Use with optional ENVIROSENSE to monitor temperature and humidity or to control and monitor alarms and security systems. RELAYIOCARD provides programmable contact closure interface with 6 outputs and 1 input.

D Variety of Output Options

15-, 20- and 30-amp receptacles on select models ensure maximum connection flexibility.

Multiple Server Support

Up to four built-in communication ports on select models simultaneously provide shutdown commands and reporting on multiple servers without the need for accessories.

Short Circuit Protection

Breakers safeguard your equipment and the UPS from damage due to input or output short circuits and system overloads.

6 Emergency Power Off (EPO)

A modular jack included with all models allows remote emergency shutdown.

Complete Performance Conditions Displayed

Front panel LEDs alert you to a variety of performance conditions,



including AC line present, automatic voltage regulation, UPS load and replace battery.

Bypass Operation (not shown)



SMART3000RM0D2U includes a bypass feature that allows the power module to be removed for maintenance while continuously passing through utility power to connected equipment.

Front Panel Battery Replacement (not shown)

Tripp Lite UPS batteries will protect equipment for several years with normal use. Most models feature a removable panel which allows for internal battery replacement.* Internal batteries can be "hot-swapped".

* Tripp Lite offers a complete line of replacement battery cartridges (R.B.C.); visit www.tripplite.com.

Specifications

				-							RoH
wodel	Output Capacity (VA/Watts)	Backup Time (Typical Minutes) Half/Full Load ^(c)	Optional External Battery Packs	Total Rack Space	Nominal Input- Output Voltage/ Frequency 60 Hz	AC F	Receptacles NEMA Type	Customized Load Management Banks	"Sma	rt" Comm. Ports RS-232 (DB9)	Input Plug (NEMA)
UPS Systems	(VA) VValls)	Hall/I ull Loau	Dallery Facks	орасс	Trequency 00 Hz	Qualitity	NLINIA TYPE	Daliks	000	110-232 (DD3)	(INLINIA)
SMART500RT1U	500/300	17/5		1U	120	7 ^(D)	5-15R	1	1	1	5-15P
SMART750RM1U	750/450	24/7	_	1U	120	6	5-15R	2	1	1	5-15P
	,	,	AB		_			_		1	
SMART750RMXL2U	750/450	34/16+	AID	2U	120	6	5-15R	2	1	1	5-15P
SMART1000RM1U	1000/640	24/10	_	1U	120	6	5-15R	2	1	1	5-15P
SMART1000RM2U	1000/700	21/9	_	2U	120	6	5-15R	2	1	1	5-15P
SMART1500RM2U	1500/1000	21/7.5	_	2U	120	8	5-15R	2	1	1	5-15P
SMART1500RMXL2Ua	,	21/7.5+	CD	2U	120	8	5-15R	3	1	1	5-15P
SMART2200RMXL2U	2200/1600	16/6+	EF	2U	120 (& 100 or 110) user-selectable	8	4 (5-15R), 4 (5-15/20R)	3	1	1	5-20P ^(E)
SMART2600RM2U	2600/2100 ^(B)	18/6+	EF	2U	120	9	4 (5-15R), 4 (5-15/20R), 1 (L5-20R)	3	1	1	5-20P ^(E)
SMART3000RM2U	3000/2250	13/4+	EF	2U	120	9	4 (5-15R), 4 (5-15/20R), 1 (L5-30R)	3	1	1	L5-30P ⁽⁾
SMART3000RMOD2U	3000/2880	11/3.8+	GH	2U	120	7	6 (5-15R), 1 (L5-30R)	2	1	1	L5-30P
SMART5000RT3U	5000/4000 ^(B)	38/16+	F	6U	208 (In); 208 & 120 (Out)	14	10 (5-15R), 2 (5-15/20R), 1 (L6-30R), 1 (L14-30R)	8	2	2	L6-30P
SMART5000XFMRXL	5000/3750 ^(B)	20/8.5+	F	3U	208 (ln); 208 & 120 (Out)	11	8 (5-15/20R), 2 (L6-20R), 1 (L6-30R)	8	1	2 ^(F)	L6-30P
SMART5000TEL3U	5000/3750 ^(B)	20/8.5	_	3U	208 (In); 208 & 120 (600VA @ 120V max.) Out	5	2 (5-15R), 2 (L6-20R), 1 (L6-30R)	_	1	2 ^(F)	L6-30P

External Battery Packs and Accessories

External Battery Packs	and Accessories
A BP24V28-2U	24V external battery pack and cable, 2U. Not expandable. RED/BLACK 2-point connector.
B BP24V70-3U	24V external battery pack and cable, 3U. Expandable. RED/BLACK 2-point connector.
C BP36V15-2U	36V external battery pack and cable, 2U. Not expandable. GREY 2-point connector.
■ BP36V42-3U	36V external battery pack and cable, 3U. Expandable. GREY 2-point connector.
E BP48V24-2U	48V external battery pack and cable, 2U. Not expandable. BLUE 2-point connector.
F BP48V60RT3U	48V external battery pack and cable, 3U. Expandable. BLUE 2-point connector.
G BP72V15-2U	72V external battery pack and cable, 2U. Not expandable. BLACK 3-point connector.
H BP72V28RT-3U	72V external battery pack and cable, 3U. Expandable. BLACK 3-point connector.
SNMPWEBCARD	Internal SNMP/Web management accessory card (connects compatible UPS systems to Ethernet).
ENVIROSENSE	Allows UPS to monitor external temperature/humidity and contact-closure inputs (requires SNMPWEBCARD).
RELAYIOCARD	Programmable contact closure accessory card with 6 output contacts and 1 input contact.
2-9USTAND	Tower kit with 2 adjustable base stands—2U to 9U—(for all models except 1U models).
4P0STRAILKIT	Adjustable horizontal mounting rails for 4-post rackmount installation. For all UPS and battery pack models.
2POSTRMKITWM	Horizontal mounting rails for 2-post rackmount installation. For all UPS and battery pack models.
UPSHDEARKIT	Heavy-duty mounting ear kit supports 2U cabinets up to 65 lb from front vertical rails in 4-post racks. Not suitable for 2-post mounting.

Common specifications for all UPS systems: Accessory card slot for optional SNMPWEBCARD or RELAYIOCARD. 10 ft. power cord. All models include mounting hardware to fit standard 19 in. racks.

+ Backup times are expandable using external battery packs. (A) Certifications vary by model. (B) SMART2600RM2U models will supply 2600VA output with included 30A plug. SMART5000RT3U, SMART5000XFMRXL and SMART5000TEL3U models provide 4500VA output with included plug, but will supply 5000VA output with user-supplied 50A plug. While SMART5000RT3U and SMART5000TEL3U models supply full VA output through both 208 and 120V receptacles, SMART5000TEL3U models are limited to providing 540VA output through its 120V receptacles (or 600VA with user-supplied 50A plug). (C) Backup times will vary depending on battery condition and load. (III) SMART500RT1U features one "surge-only" receptacle designed for printers. (B) These models include an additional plug which can be installed in place of the existing plug. Installing the additional plug will change the output capacity. (SMART200RMXL2U: 5-15P; SMART2600RM2U: L5-30P; SMART3000RM2U: 5-20P) (F) SMART5000XFMRXL and SMART5000TEL3U include an RS-232 DB9 port and a relay contact-closure DB9 port.

5

SmartPro® Shallow-Depth Rackmount UPS Systems



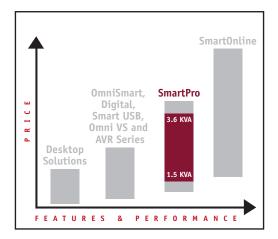
SMART3000CRMXL/SMART2200CRMXL & BP48V48RT4U

Support Network/Telecom Wiring Closets

Shallow mounting depth matches popular network/telecom equipment and allows UPS systems to fit in confined spaces. High load capacity and internal battery capacity allow you to attach more equipment safely without installing additional circuits and UPS systems. SMART3000CRMXL, SMART2200CRMXL and the matching BP48V48RT4U external battery pack include all hardware required for secure mounting in 2-post network/ telecom racks. Combine with Tripp Lite's SR2POST or SR2POST25 2-post racks to create ideal solutions for organizing, protecting and powering important equipment in cramped network/telecom wiring closets.

Lower Operating Costs

AC-to-AC efficiency up to 97% reduces power consumption and lowers operating costs. Each two watts saved by increased UPS efficiency saves an additional watt in cooling requirements. Higher efficiency also lowers your facility's environmental impact.



- ▶ 1,500 3,600 VA
- ▶ Best-In-Class Mounting Depth
- ► Automatic Voltage Regulation (AVR)
- ▶ Optional External Battery Packs for Extended Runtime

Protect Sensitive Equipment

Line-interactive operation—also known as automatic voltage regulation (AVR)—automatically adjusts incoming voltage to safe levels without draining battery power. Reliable battery backup keeps equipment operating through power failures. Pure sine wave output guarantees maximum stability and compatibility with sensitive equipment. All outlets include network-grade surge suppression and noise filtering. SMART3000CRMXL and SMART2200CRMXL include an automatic AC bypass that keeps equipment powered in case of internal fault or battery depletion.

Extend Runtime

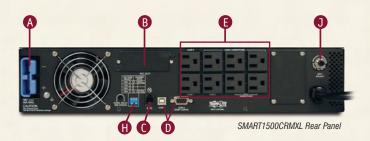
All models accept external battery packs to provide extended runtime. Without enough runtime, businesses stand to lose up to \$50,000 per hour according to a recent survey on the cost of lost productivity for an hour of network downtime.* Locate your planned load and optimum runtime on the chart to the right.

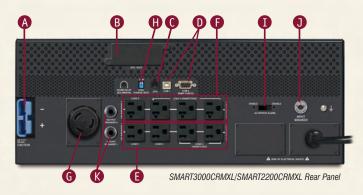
	Estimated Battery Backup Runtime (minutes)												
A R	Model	200W	400W	600W	800W	1000W	1200W	1400W	1600W	1800W	2400W	3000W*	3600W*
H	SMART1500CRMXL	69	30	18	12	10	7.9	6.3	_	_	_	_	_
ш	+1 BP48V24-2U	299	141	88	61	46	36	29	_	_	_	_	_
Σ	SMART2200CRMXL	177	82	51	36	27	21	17	14	12	_	_	_
I	+1 BP48V48RT4U	788	400	260	190	146	116	95	80	69	_	_	_
N N	+2 BP48V48RT4U	1271	662	439	324	253	202	168	142	123	_	_	_
R	+3 BP48V48RT4U	1738	922	618	459	361	291	242	206	179	_	_	_
۵	SMART3000CRMXL	183	83	52	36	27	22	19	15	13	9.1	6.7	5.1
D E	+1 BP48V48RT4U	707	349	226	163	126	102	85	72	62	44	_	_
z	+2 BP48V48RT4U	1145	581	383	281	219	178	149	128	111	79	_	_
TE	+3 BP48V48RT4U	1570	812	541	400	314	257	216	186	162	116	_	_
×	* For output >2880W use in	nternal batte	ries only. B	attery back	up runtime	varies with	load, battery	condition ar	nd other facto	irs.			

For additional extended runtime solutions to fit your specific load requirements, use Tripp Lite's interactive UPS Selector Guide at www.tripplite.com/selector/ups, or call Tripp Lite's Application Specialists at (773) 869-1236.

^{*} Yankee Group

Feature Focus





A External Battery Pack Connector
Connects to an external battery pack for
extended battery backup runtime. Expandable
battery packs can be daisy-chained for additional
runtime expansion.

B Accessory Card Slot

Accepts optional internal SNMPWEBCARD or RELAYIOCARD. SNMPWEBCARD provides network interface for monitoring and control via SNMP, Web or telnet, enabling remote reboots, shutdowns and more. Use with optional ENVIROSENSE to monitor temperature and humidity or to control and monitor alarms and security systems. RELAYIOCARD provides programmable contact closure interface with 6 outputs and 1 input.

- © Emergency Power Off (EPO) Connector Connects to facility's emergency power off switch for emergency shutdown of the UPS system.
- HID-Compliant USB Port and RS-232 Serial Port (DB9)
 Connects to a computer's USB or serial port for

Connects to a computer's USB or serial port for automatic shutdown during extended power failures. Use with PowerAlert software* or the built-in power management utilities of Mac OS® X, Linux® and Windows®. PowerAlert CD-ROM and cabling are included.

 * Additional PowerAlert features: pages 26 and 27.

6 5-15R Outlets

Select outlets can be switched on or off remotely through PowerAlert software or SNMPWEBCARD, enabling connected equipment reboot or shutdown.

6 5-15/20R Outlets

These 20-amp outlets accommodate 5-15P or 5-20P plugs. Select outlets can be switched on or off remotely through PowerAlert software or SNMPWEBCARD, enabling connected equipment reboot or shutdown.

- **(5** L5-30R Outlet (SMART3000CRMXL only) This 30-amp outlet connects to an L5-30P twist-lock plug.
- Charge Rate Switch

Sets battery charger to higher or lower amperage. Increasing the amperage allows the UPS system to recharge batteries more rapidly when external battery packs are connected.

AC Bypass Alarm Switch

Enables or disables AC bypass alarm. In case of internal fault or battery depletion, the bypass routes AC power to the outlets.

- 1 Input Breaker
- $\begin{tabular}{ll} \textbf{(SMART3000CRMXL only)} \\ \end{tabular}$

Internal Battery Replacement (not shown)

Recyclable internal batteries last several years under normal conditions. A removable front panel allows hot-swappable internal battery replacement. Tripp Lite offers a complete line of replacement batteries.

Easy-to-Read Control Panel

Front panel LEDs display a variety of power conditions, including AC line status, automatic voltage regulation, overload, on battery, check battery and more. Real-time



updates allow you to respond to power problems before your equipment is placed at risk.

Specifications

									ROHS
NOM (A)	Output Capacity (VA/Watts)	Typical Backup Runtime (Half/Full Load)	Nominal Input/Output Voltage & Frequency	AC Outlet Quantity (Type)	Remotely Switchable Outlets	Comm. Ports	Plug Type (10 ft cord)	Primary Mounting Option	Dimensions (H x W x D)
SMART1500CRMXL	1500VA/1440W	14/6 min	120V AC, 60 Hz.	8 (5-15R)	3	RS-232, USB, EP0	5-15P	4-Post Rack (2U)	3.5 x 17.25 x 19.5 in
SMART2200CRMXL	2200VA/1900W	28/11 min	120V AC, 60 Hz.	4 (5-15R) & 4 (5-15/20R)	3	RS-232, USB, EP0	5-20P	2-Post Rack (4U)	7 x 17.25 x 17.75 in
SMART3000CRMXL	3000VA/2880W (3600VA/3600W via optional hardwire) ^(A)	19/7.5 min ^(B)	120V AC, 60 Hz.	4 (5-15R) & 4 (5-15/20R) & 1 (L5-30R)	3	RS-232, USB, EP0	L5-30P (optional hardwire)	2-Post Rack (4U)	7 x 17.25 x 17.75 in

External Battery Packs

BP48V48RT4U	Expandable 4U battery pack optimized for SMART3000CRMXL and SMART2200CRMXL. Includes 2-post mounting hardware. 17.75 inch depth.
BP48V24-2U	Non-expandable 2U battery pack optimized for SMART1500CRMXL. Includes 4-post mounting hardware. 13.5 inch depth.
BP48V60RT3U	Expandable 3U battery pack. Includes 4-post mounting hardware. 26 inch depth.
Accessories	
SNMPWEBCARD	Internal card adds Ethernet (RJ45) network interface to UPS for remote monitoring and control via SNMP, Web or telnet.
ENVIROSENSE	Allows UPS to monitor external temperature, humidity and contact-closure inputs. Requires SNMPWEBCARD.
RELAYIOCARD	Programmable contact closure accessory card with 6 output contacts and 1 input contact.
2P0STRMKITWM	Mounting kit for 2-post rackmount installation. Included with SMART3000CRMXL, SMART2200CRMXL and BP48V48RT4U.
4POSTRAILKIT	Mounting kit for 4-post rackmount installation. Included with all UPS systems and battery packs except SMART3000CRMXL, SMART2200CRMXL and BP48V48RT4U.
UPSHDEARKIT	Heavy-duty mounting ear kit supports 2U cabinets up to 65 lb from front vertical rails in 4-post racks. Not suitable for 2-post mounting.
2-9USTAND	Tower kit with two adjustable base stands enables vertical placement of LIPS systems and battery packs

⁽A) Included cord and plug can be removed to permit hardwire input for 3600VA/3600W output capacity. (B) Typical half/full load backup time is 13/5 min for optional hardwire input. Battery backup runtime varies with load, battery condition and other factors.

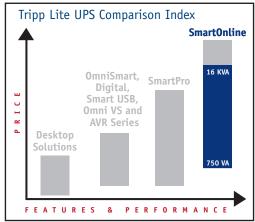
$SmartOnline^{^{\mathrm{TM}}}\ Single-Phase$ Intelligent True On-Line UPS Systems



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 AC power: ±3% V or ±2% V and ±0.05 Hz.

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 safely shut down during longer ones. In addition, they stop damaging surges and filter disruptive line noise.



TRUE ON-LINE

- ▶ 750 16,000 VA
- Zero Transfer Time, Double-Conversion
- ► Wide Input Voltage Range with Precision-Regulated Output
- ► Extended Runtime Options
- ► Automatic Internal Bypass
- Maintenance Bypass & Detachable PDU Options

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 Customized Load Management Banks.

Control Individual Outlets

Customized Load Management 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 receptacles on the UPS system. You can also program PowerAlert to shut down less important systems during an extended blackout, preserving battery runtime for more critical equipment.

Save Electricity & 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.*

^{*} Additional PowerAlert features: pages 26 and 27.

 $^{^{\}star}$ See back cover for more information.

Provide 100% Availability with Hot-Swappable Modular Design





Hot-Swap the UPS Module . . .

... PDU Module Continues Powering Equipment

All SmartOnline Rackmount/Tower UPS Systems include an automatic internal bypass that ensures 100% availability of connected equipment by passing through utility power in the event of an internal fault or overload. Hot-Swappable Modular models include two additional features that ensure continuous availability: an external maintenance bypass switch and a modular design. When the external switch is set to "bypass", the UPS module can be removed for maintenance while the detachable PDU module remains installed, continuing to power connected equipment as long as utility power is present. Hot-Swappable Modular models are designated by the symbol in the specifications chart on page 12.

Adapt to Rack/ Tower/Stack Applications

Adapt all models from rackmount to tower or stacking applications.*

- Removable rack hardware
- Optional base stands



SU3000RTXL3U tower mount with optional base stands.



SU6000RT3U or SU10KRT3U tower mount with optional base stands.

* Optional base stands (model: 2-9USTAND) are available to adapt any combination of models, from 2U to 9U wide, to tower mounting.

Display Critical Operational Conditions

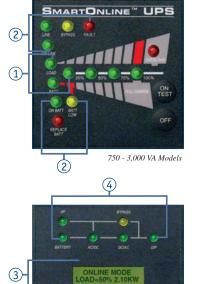
SmartOnline Rackmount/Tower UPS Systems feature a front panel LED display or combination LCD/LED display which shows a variety of UPS operational modes and conditions. This interface provides more information than comparable models, allowing you to react more rapidly to an alert before your systems are put at risk.

LED Display— ① **Battery & Load Conditions:** The Load and Battery Active Meters allow you to monitor the percentage levels (25% - 100%) of two conditions: 1) battery charge as equipment is supported by the UPS system during a blackout, and 2) the total amount of the UPS system's capacity that the equipment load is utilizing under normal operating conditions.

② Fault/Warning & UPS System Operational Conditions: LED set alerts you to several fault conditions (including wiring faults in the wall outlet) and warning conditions (including the need to recharge or replace the UPS system's internal battery). It also indicates UPS system operational status, including normal on-line operation, bypass operation (due to fault or overload) or on-battery operation (due to a blackout or severe brownout).

Combination LCD/LED Display— ③ LCD Display: LCD Display lets you access more precise information than provided by LEDs alone. View over 45 separate fault/warning and UPS system operational conditions including operational mode, alarm/shutdown conditions, input/output voltage/frequency, battery voltage, load percentage and more.

(4) **LED Display:** LED set is organized into a flow chart that indicates UPS system operational status, including normal on-line operation, bypass operation (due to fault or overload) or on-battery operation (due to a blackout or severe brownout).



5,000 - 16,000 VA Models

Feature Focus

A Extended Runtime Capability

All models feature connectors that accept optional external battery packs for additional runtime. External batteries can be "hot-swapped". See Extended Runtime Chart on page 13 to locate the perfect SmartOnline Rackmount/Tower model that fits your runtime needs.

B Detachable PDU

Passes through power to connected equipment if UPS module is removed for maintenance.

Customized Load Management
Select models feature special load banks that you control
independently through PowerAlert software.

D Server Support

Up to two built-in communication ports on select models simultaneously provide shutdown commands and reporting on multiple servers without the need for accessories.

Bypass Operation

An external maintenance bypass switch allows the UPS module to be removed for maintenance while continuously passing through utility power to connected equipment.



Accepts optional internal SNMPWEBCARD or RELAYIOCARD. SNMPWEBCARD provides network interface for monitoring and control via SNMP, Web or telnet, enabling remote reboots, shutdowns and more. Use with optional ENVIROSENSE to monitor temperature and humidity or to control and monitor alarms and security systems. RELAYIOCARD provides programmable contact closure interface with 6 outputs and 1 input.

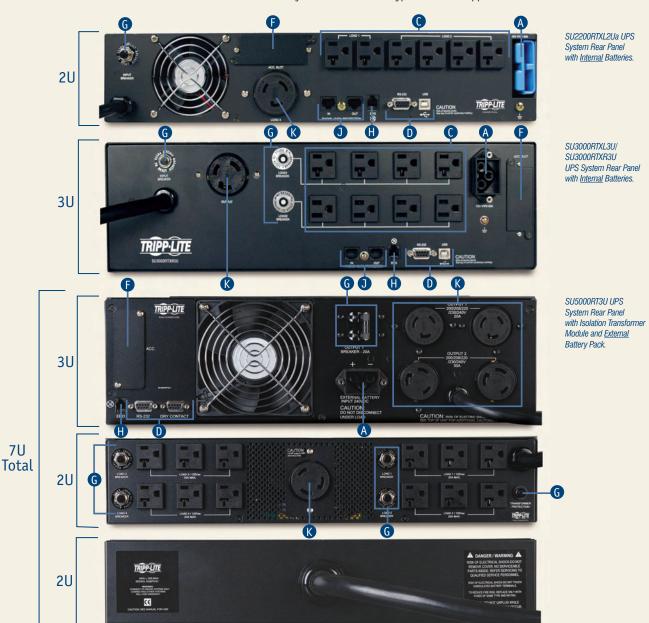
G Short Circuit Protection

Circuit breakers help guard against input/output short circuits and system overloads.

H Emergency Power Off

A modular jack included with select models allows remote emergency shutdown. All other models can perform emergency shutdown by attaching an optional cable (model 73-0909, sold separately) to the communication port. The optional cable includes a DB9 connector to allow server support and a modular jack to allow emergency shutdown.

Standard Models 100% Availability Features: Internal Bypass • Hot-Swappable Batteries



1 Hardwire, Single-Phase Input

To convert select models to hardwire input and output, select optional hardwire input/output PDUs. To add an input plug and receptacles to SU6000RT3U and SU6000RT3UHV select SUPDM alternate back panel accessories.

1 Phone/DSL/Ethernet Surge Protection (Select Models)

Protect Internet-connected or networked computers from damage on a single phone/DSL/Ethernet line with surge-protected jacks featured on select models.

K Variety of Output Options

15-, 20- and 30-amp receptacles on select models ensure maximum connection flexibility.

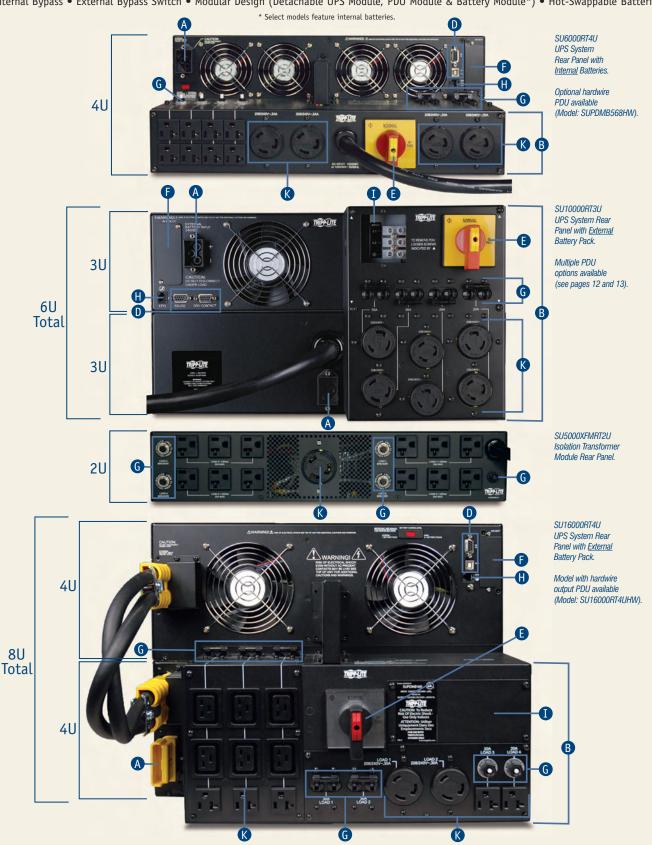
Front Panel Battery Replacement (not shown)

1,000 to 3,000 VA models feature a convenient front access door to replace internal batteries.* All models allow "hot-swap" battery replacement.

* Tripp Lite offers a complete line of replacement battery cartridges (R.B.C.); visit www.tripplite.com.

Hot-Swappable Modular Models 100% Availability Features:

Internal Bypass • External Bypass Switch • Modular Design (Detachable UPS Module, PDU Module & Battery Module*) • Hot-Swappable Batteries



Specifications

(VL) us NOM (A)	Output	Backup Time	Optional External	Total	Input Voltage	Nominal			Co	mmunication "Smart"	Ports Contact		Powe
Model	Capacity (VA/Watts)	(Typical Minutes) Half/Full Load ⁽⁸⁾	Battery Packs	Rack Space	Range/ Frequency (Hz)	Output Voltage	AC F Quantity	Receptacles Type	USB	RS-232 (DB9)	Closure (DB9)	Input Plug (NEMA)	Leng (ft)
UPS Systems				•									
SU750RTXL2U	750/ 600	11/4+	AB	2U	65-138 (50/60) ^(c)	120 (100/ 110/120)	6	5-15R ^{(D)(E)}	1	1 ^(F)	_	5-15P	10
SU1000RTXL2Ua	1000/ 800	14/4.5+	AB	2U	65-138 (50/60) ^(c)	120 (100/ 110/120)	6	5-15R ^{(D)(E)}	1	1 ^(F)	_	5-15P	10
SU1500RTXL2Ua	1500/ 1200	17/5+	CD	2U	65-138 (50/60) ^(c)	120 (100/ 110/120)	6	5-15R ^{(D)(E)}	1	1(F)	_	5-15P	10
SU2200RTXL2Ua	2200/ 1600	14/4.5+	CD	2U	65-138 (50/60) ^(c)	120 (110/120)	7	6 (5-15/20R), 1 (L5-20R) ^{(D)(E)}	1	1(F)	_	5-20P ^(G)	10
SU3000RTXL2U	3000/ 2500	14/5+	EF	2U	70-144 (50/60) ^(c)	120 (100/110/ 120)	7	6 (5-15/20R), 1 (L5-30R) ⁽⁰⁾	1	1(F)	_	L5-30P	10
SU3000RTXL3U	3000/ 2400	13/5+	EF	3U	65-138 (50/60) ^(c)	120 (110/120)	9	4 (5-15R), 4 (5-15/20R), 1 (L5-30R) ^{(D)(E)}	1	1 ^(F)	_	L5-30P	10
SU3000RTXR3U	3000/ 2400	33/14+	EF	3U	65-138 (50/60) ^(c)	120 (110/120)	9	4 (5-15R), 4 (5-15/20R), 1 (L5-30R) ^{(D)(E)}	1	1(F)	_	L5-30P	10
SU3000RTXL3UHV	3000/ 2400	17/6+	EF	3U	160-275 (50/60) ^(c)	208/240	8	6 (6-15/20R), 2 (L6-20R) ⁽⁰⁾	_	1(F)	_	L6-20P	10
SU5000RT4U	5000/ 3800	17/8+	G	4U	65-140 (60) (L-N)	208/240 & 120	12	8 (5-15/20R), 2 (L6-20R), 2 (L6-30R)	1	1(F)	_	L14-30P (split phase 4 wire)	10
SU5000RT3U	5000/ 3500	20/8+		7U	156-276 (50/60) ^(c)	208 & 120	16	2 (L6-20R), 2 (L6-30R), 12 (5-15/20R)	_	1	1	L6-30P	10
SU5000RT3UHV ^(A)	5000/ 3500	20/8+		5U	156-276 (50/60) ^(c)	208/240	4	2 (L6-20R), 2 (L6-30R)	_	1	1	L6-30P	10
SU6000RT4U	6000/ 4200	24/9+	G	4U	65-140 (60) (L-N)	208/240 & 120	12	8 (5-15/20R), 2 (L6-20R), 2 (L6-30R)	1	1 ^(F)	_	L14-30P (split phase 4 wire)	10
SU6000RT3U	6000/ 4200	37/15+		9U	156-276 (50/60) ^(c)	208/240 & 120	hard (K) 8	wire standard & L optional)	_	1	1	hardwire (K & L	standa option
SU6000RT3UHV	6000/ 4200	37/15+		6U	156-276 (50/60) ^(c)	208/240	hard	wire standard poptional)	_	1	1	hardwire (J op	standa
SU8000RT4U	8000/ 5600	12/5+	G	4U	65-140 (60) (L-N)	208/240 & 120	8	4 (5-15/20R), 2 (L6-20R), 2 (L6-30R) plus hardwire	1	1 ^(F)	_	hard (split p	ohase
SU8000RT3U	8000/ 6400	15/6+		6U	156-276 (50/60) ^(c)	208/240	6	4 (L6-20R), 2 (L6-30R)	_	1	1	hard	wire
SU8000RT3UN50	8000/ 6400	15/6+		6U	156-276 (50/60) ^(c)	208/240	6	4 (L6-20R), 2 (L6-30R)	_	1	1	50A Hubbell CS8265C	10
SU8000RT3U1TF	8000/ 6400	15/6+		8U	156-276 (50/60) ^(c)	208 & 120	18	4 (L6-20R), 2 (L6-30R), 12 (5-15/20R)	_	1	1	hard	wire
SU8000RT3UN50TF	8000/ 6400	15/6+		8U	156-276 (50/60) ^(c)	208 & 120	18	4 (L6-20R), 2 (L6-30R), 12 (5-15/20R)	_	1	1	50A Hubbell CS8265C	10
SU8000RT3UG	8000/ 6400	15/6+		6U	156-276 (50/60) ^(c)	208/240	6	C19	_	1	1	hard	wire
SU8000RT3UHW	8000/ 6400	15/6+		6U	156-276 (50/60) ^(c)	208/240	h	ardwire	_	1	1	hard	wire
SU10000RT3U	10000/ 8000	10/4+		6U	156-276 (50/60) ^(c)	208/240	6	4 (L6-20R), 2 (L6-30R)	_	1	1	hard	wire
SU10000RT3U2TF	10000/ 8000	10/4+		10U	156-276 (50/60) ^(c)	208 & 120	18	4 (L6-20R), 2 (L6-30R), 12 (5-15/20R)	_	1	1	hard	wire
SU10000RT3UG	10000/ 8000	10/4+		6U	156-276 (50/60) ^(c)	208/240	6	C19	_	1	1	hard	wire
SU10KRT3UHV	10000/ 8000	10/4+		6U	156-276 (50/60) ^(c)	208/240	ı	nardwire	_	1	1	hard	wire
SU10KRT3U	10000/ 8000	10/4+		9U	156-276 (50/60) ^(c)	208/240 & 120	ı	nardwire	_	1	1	hard	wire
SU16000RT4U	16000/ 11200	12/5+	H	8U	100-140 (60) (L-N)	208/240 & 120	13	5 (5-15/20R), 2 (L6-30R), 6 (C19)	1	1 ^(F)	_	hard (4 w	
SU16000RT4UHW	16000/	12/5+	H	8U	100-140 (60)	208/240		hardwire	1	1(F)	_	hard	wire

Extend Runtime

All models accept external battery packs to provide extended runtime. Without enough runtime, businesses stand to lose up to \$50,000 per hour according to a recent survey on the cost of lost productivity for an hour of network downtime.* Locate your planned load and optimum runtime on the chart to the right.

^{*} Yankee Group.



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

For additional extended runtime solutions to fit your specific load requirements, use Tripp Lite's interactive UPS Selector Guide at www.tripplite.com/selector/ups, or call Tripp Lite's Application Specialists at (773) 869-1236.

. [Runtime (minutes) with additional external battery packs							
⊢	Load	Runtime (minutes) with	Non-Expandable	Ex	oandable Batter	y Pack(s)**				
	(Watts)	included batteries*	Battery Pack	1	2	3	4			
~	SU750RTXL2	<u>U</u>	BP24V28-2U		BP24V70-3U		•			
	300	11.0	88.0	224.4	461.7	699.1	933.8			
⋖	600	4.0	44.1	117.1	249.9	386.3	523.3			
	SU1000RTXL	2Ua	BP24V28-2U		BP24V70-3U					
ı l	400	17.4	77.6	199.6	413.3	628.1	841.1			
_	800	6.0	32.4	87.3	189.1	295.2	402.5			
	SU1500RTXL		BP48V24-2U		BP48V60RT3U					
ں	600	17.0	80.3	164.6	334.2	506.1	677.5			
	1200	5.0	33.6	71.3	151.0	234.8	320.2			
	SU2200RTXL	2Ua	BP48V24-2U		BP48V60RT3U					
	800	14.0	56.2	117.0	241.9	370.3	499.3			
ш	1600	4.5	23.1	49.7	107.0	168.2	231.2			
_	SU3000RTXL		BP72V15-2U		BP72V28RT-3U					
	1250	13.0	37.0	106.0	181.0	259.0	338.0			
Σ	2500	5.0	15.0	46.0	82.0	119.0	158.0			
	SU3000RTXL	3U & SU3000RTXL3UHV	BP72V15-2U		BP72V28RT-3U					
ы	1200	17.0	40.9	77.6	157.8	241.9	327.3			
	2400	6.0	16.8	32.8	69.1	108.4	149.5			
	SU3000RTXR		BP72V15-2U		BP72V28RT-3U					
⊢	1200	33.0	58.8	97.1	178.6	263.1	348.8			
	2400	14.0	24.6	41.5	78.7	118.6	159.9			
z	SU5000RT3U	& SU5000RT3UHV			BP240V10RT3U	1				
	1740	20.1	N/A	73.1	161.6	225.8	291.0			
_	3500	8.0	N/A	30.6	70.2	100.0	130.9			
_	SU5000RT4U	i			BP192V12-3U		•			
	1740	22.8	N/A	107.9	174.9	243.9	313.8			
≃	3750	8.0	N/A	42.5	70.7	100.7	131.7			
	SU6000RT3U	& SU6000RT3UHV			BP240V10RT3U	ı				
	2100	37.0	N/A	80.0	130.9	183.9	237.9			
	4200	15.0	N/A	33.4	55.9	80.0	105.1			
	SU6000RT4U		.,,		BP192V12-3U		1			
_	2100	24.0	N/A	86.6	141.4	198.2	256.0			
	4200	9.0	N/A	36.8	61.5	87.8	115.2			
ш	SU8000RT4U	***	14/14	00.0	BP192V12-3U	01.0	110.2			
	2800	12.0	N/A	45.8	100.0	141.4	183.8			
_	5600	5.0	N/A	19.0	42.8	61.5	81.1			
		, SU8000RT3U1TF, SU8000I			BP240V10RT3U		01.1			
		N50, SU8000RT3UN50TF &		,	DI 240V 1011130					
Z	3200	15.0	N/A	46.0	76.4	108.7	142.0			
	6400	6.0	N/A	18.6	31.6	45.6	60.4			
ш		SU10KRT3UHV, SU10000RT					00.4			
			30,		BP240V10RT3U	'				
⊢		U2TF & SU10000RT3UG	NI/A	05.1	E0.0	00.0	1100			
	4000	10.0	N/A	35.1	58.6	83.8	110.0			
	8000	4.0	N/A	13.7	23.5	34.1	45.3			
×		U & SU16000RT4UHW		10.0	BP192V18-4U	1000	1000			
	5600	12.0	N/A	42.2	70.2	100.0	130.9			
ш	11200	5.0	N/A	17.1	29.2	42.2	55.9			
	* Included batteries a connected together fo	re contained either internally within the UPS s or increased runtime.	ystem or are offered as an exter	nal module, depen	ting on model. ** Battery	packs which are "ex	pandable" can be			

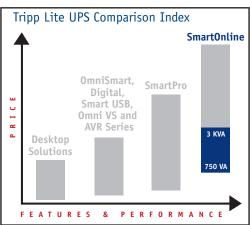
Model	Description
External Battery Pac	
A BP24V28-2U	24V external battery pack and cable, 2U. Not expandable. RED/BLACK 2-point connector.
B BP24V70-3U	24V external battery pack and cable, 3U. Expandable. RED/BLACK 2-point connector.
C BP48V24-2U	48V external battery pack and cable, 2U. Not expandable. BLUE 2-point connector.
D BP48V60RT3U	48V external battery pack and cable, 3U. Expandable. BLUE 2-point connector.
E BP72V15-2U	72V external battery pack and cable, 2U. Not expandable. BLACK 3-point connector.
F BP72V28RT-3U	72V external battery pack and cable, 3U. Expandable. BLACK 3-point connector.
G BP192V12-3U	192V external battery pack and cable, 3U. Expandable. BLACK 3-point connector.
H BP192V18-4U	192V external battery pack and cable, 4U. Expandable. YELLOW INSULATED 2-point connector.
BP240V10RT3U	240V external battery pack and cable, 3U. Expandable. BLACK 3-point connector.
SU5000XFMRT2U	2U rack/tower mount isolation transformer. 208V input (L6-30P plug), 100/120V output. Outlets: 12 (5-15/20R) and 1 (L6-30R).
SUPDMB568HW	Hardwire PDU. Replaces UPS system's detachable PDU. (for SU5000RT4U, SU6000RT4U models only).
SUPDMB710HW	Hardwire PDU. Replaces UPS system's detachable PDU. (for SU8000RT3U, SU10000RT3U models only).
SUPDMB710IEC	Detachable PDU with six C19 outlets and hardwire input. Replaces PDU for SU8000RT3U & SU10000RT3U.
SUPDMB16KHW	Hardwire PDU. Replaces UPS system's detachable PDU. (for SU16000KRT4U model only).
J SUPDM11	Converts hardwired to L6-30P plug/cord & two L6-30R outlets. 200/208/240V (for SU6000RT3UHV model only).
K SUPDM12	Converts hardwired to L6-30P plug/cord & 13 outlets: ten 120V (5-15/20R), two 208V (L6-20R), one 208V (L6-30R) (for SU6000RT3U model only).
L SUPDM13	Converts hardwired to L6-30P plug/cord & 13 outlets: ten 120V (5-15/20R), two 240V (L6-20R), one 240V (L6-30R) (for SU6000RT3U model only).
SNMPWEBCARD	Internal SNMP/Web management accessory card (connects compatible UPS systems to Ethernet).
ENVIROSENSE	Allows UPS to monitor external temperature/humidity & contact-closure inputs (requires SNMPWEBCARD).
RELAYIOCARD	Programmable contact closure accessory card with 6 output contacts and 1 input contact.
AS400CABLEKIT	Provides shutdown capability for IBM® System i™ / AS400° / iSeries™ servers through any Smart0nline UPS.
2-9USTAND	Tower kit with 2 adjustable base stands—2U to 9U.
2POSTRMKITWM	Horizontal mounting rails for 2-post rackmount installation. For all UPS and battery pack models.
UPSHDEARKIT	Heavy-duty mounting ear kit supports 2U cabinets up to 65 lb from front vertical rails in 4-post racks. Not suitable for 2-post mounting.

Common specifications for all UPS systems: Accessory card slot for optional SMMPWEBCARD or RELAYIOCARD. All models are designed with mounting hardware to fit standard 19 in. racks. + Backup times are expandable using external battery packs. (4) Optional SUS000XFMRT2U isolation transformer is available to provide 100/120V output. (8) Backup times will vary depending on battery condition and load. (6) Auto-selecting frequency. (9) Includes customized load management receptacles. (6) Includes phone/DSL/Ethernet surge protection. (9) Includes a single combination RS-232 and contact-closure port. (9) This model includes an additional 5-15P plug which can be installed in place of the existing plug. Installing the additional plug will change the output capacity. (9) Certifications vary by model.



$SmartOnline^{^{ imes}}$ Intelligent True On-Line UPS Systems





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

SmartOnline 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 AC power: $\pm 3\%$ V or $\pm 2\%$ V and ± 0.05 Hz.

SmartOnline 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 safely shut down during longer ones. In addition, they stop damaging surges and filter disruptive line noise. All models ensure 100% availability with an automatic internal bypass which passes through utility power in the event of an internal fault or overload.

Manage Multiple Servers

Using PowerAlert software, simultaneously manage 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. You can use PowerAlert to reboot a locked-up server by cycling the power to select UPS receptacles or shut down nonessential systems during a blackout, preserving runtime for more critical equipment.

* Additional PowerAlert features: pages 26 and 27.

Save Electricity & 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.*

* See back cover for more information.

TRUE ON-LINE

- ▶ 750 3,000 VA
- ► Zero Transfer Time, Double-Conversion
- ► 65-138 V Input with Precision-Regulated Output
- Automatic Internal Bypass
- ► Internal Batteries & Extended Runtime Options

Extend Runtime

All models accept external battery packs to provide extended runtime. Without enough runtime, businesses stand to lose up to \$50,000 per hour according to a recent survey on the cost of lost productivity for an hour of network downtime.* Locate your planned load and optimum runtime on the chart below.

* Yankee Group.

A R T	Load	Runtime (minutes) with included	Runtime (minutes) with additional external battery packs							
Ŧ	(Watts)	batteries	1	2	3	4				
ں	SU750XL Ext	tended Runtime (with E	3P24V70-	3U battery	pack)					
ш	300	11.0	224.4	461.7	699.1	933.8				
Σ	600	4.0	117.1	249.9	386.3	523.3				
н	SU1000XLa	Extended Runtime (with	h BP24V7	0-3U batte	ery pack)					
-	400	17.4	199.6	413.3	628.1	841.1				
Z	800	6.0	87.3	189.1	295.2	402.5				
	SU1500XL E	xtended Runtime (with	BP48V60	RT3U bati	tery pack)				
~	600	17.0	164.6	334.2	506.1	677.5				
Q	1200	5.0	71.3	151.0	234.8	320.2				
ш	SU2200XLa	Extended Runtime (with	h BP48V6	ORT3U ba	ttery pac	k)				
۵	800	14.0	117.0	241.9	370.3	499.3				
Z	1600	4.5	49.7	107.0	168.2	231.2				
H	SU3000XL Extended Runtime (with BP72V28RT-3U battery pack)									
· ×	1200	17.0	77.6	157.8	241.9	327.3				
ш	2400	6.0	32.8	69.1	108.4	149.5				
For	additional exten	ded runtime solutions to	fit your cr	acific load	requirem	onte				

For additional extended runtime solutions to fit your specific load requirements, use Tripp Lite's interactive UPS Selector Guide at www.tripplite.com/selector/ups, or call Tripp Lite's Application Specialists at (773) 869-1236.

Feature Focus

A Extended Runtime Capability

All models feature connectors that accept optional external battery packs for additional runtime. External batteries can be "hot-swapped". See Extended Runtime Chart on page 14 to locate the perfect SmartOnline Tower model that fits your runtime needs.

B Customized Load Management

Prioritize the uptime of mission-critical loads during a power failure. All models feature special receptacles that you control independently through PowerAlert software. Use PowerAlert to reboot a locked-up computer or to shut down less important systems, preserving battery runtime for more critical equipment.

C Accessory Card Slot

Accepts optional internal SNMPWEBCARD or RELAYIOCARD. SNMPWEBCARD

provides network interface for monitoring and control via SNMP, Web or telnet, enabling remote reboots, shutdowns and more. Use with optional ENVIROSENSE to monitor temperature and humidity or to control and monitor alarms and security systems. RELAYIOCARD provides programmable contact closure interface with 6 outputs and 1 input.



Multiple Server Support

Built-in communication ports provide shutdown commands and reporting on multiple servers.

E Short Circuit Protection

Circuit breakers help guard against input short circuits and system overloads.

F Emergency Power Off

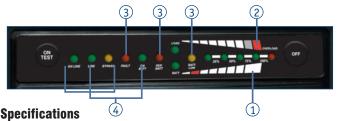
All models include a modular jack that allows remote emergency shutdown.

G Phone/DSL/Ethernet Surge Protection

Protect Internet-connected or networked computers from damage on a single phone/DSL/Ethernet line with surgeprotected jacks featured on all models.

Display Critical Operational Conditions

SmartOnline Tower UPS Systems feature a front panel LED display which displays a variety of UPS operational modes and conditions. This interface provides more information than comparable models, allowing you to react more rapidly to an alert before your systems are put at risk.



1 Battery Conditions

The Battery Active Meter allows you to monitor battery charge level (25% - 100%) as equipment is supported by the UPS system during a blackout.

(2) Load Conditions

The Load Active Meter allows you to monitor the total amount of the UPS system's capacity (25% - 100%) that the equipment load is utilizing under normal operating conditions.

(3) Fault/Warning Conditions

LED set alerts you to several fault conditions (including wiring faults in the wall outlet) and warning conditions (including the need to recharge or replace the UPS system's internal battery).

(4) UPS System Operational Conditions

LED set indicates UPS system operational status. The LEDs indicate normal on-line operation, bypass operation (due to fault or overload) or on-battery operation (due to a blackout or severe brownout).

	NOM (D)	Output Capacity (VA/Watts)	Backup Time (Typical Minutes) Half/Full Load ^(A)	Optional External Battery Packs	AC Receptacles Quantity NEMA Type		Customized Load Management Banks USB "Smart" RS-232 (DB9)		Input Plug (NEMA)		
	SmartOnline UP				Quantity		240				
<u></u>	SU750XL	750/600	11/4+	AB	6	5-15R	2	1	1 (B)	5-15P	
	SU1000XLa	1000/800	14/4.5+	A B A B	6	5-15R	2	1	1 (B)	5-15P	
<u></u>	SU1500XL	1500/1200	14/4.5+	CD	6	5-15R	2	1	1 (B)	5-15P	
	SU2200XLa	2200/1600	14/4.5+	CD	7	6 (5-15/20R),	2	1	1 (B)	5-20P(C)	
						& 1 (L5-20R)					
•	SU3000XL	3000/2400	14/5+	EF	9	4 (5-15R),	2	1	1 (B)	L5-30P	
						4 (5-15/20R) & 1 (L5-30R)					

External Battery Packs and Accessories

A BP24V70-3U	24V external battery pack and cable. Tower or 2U rack. Expandable. Small RED/BLACK connector.
B BP24V28-2U	24V external battery pack and cable. Tower or 2U rack. Not expandable. Small RED/BLACK connector.
C BP48V60RT3U	48V external battery pack and cable. Tower or 3U rack. Expandable. BLUE 2-point connector.
D BP48V24-2U	48V external battery pack and cable. Tower or 2U rack. Not expandable. BLUE 2-point connector.
E BP72V28RT-3U	72V external battery pack and cable. Tower or 3U rack. Expandable. BLACK 3-point connector.
F BP72V15-2U	72V external battery pack and cable. Tower or 2U rack. Not expandable. BLACK 3-point connector.
0	ing for all LIDO and are CT 400 MAO (FO/FO II) and a calculation in an area of the color of the

Common specifications for all UPS systems: 65-138 VAC (50/60 Hz, auto-selecting) input range. 120 VAC nominal output (additional user-selectable 110 and 100V options for SU750XL, SU1000XLa and SU1500XL).

Accessory card slot for optional SNMPWEBCARD or RELAYIOCARD. 10 ft. power cord. Emergency Power Off (EPO) jack. Phone/DSL/Ethernet surge protection jacks. + Backup times are expandable using external battery packs. (A) Backup times will vary depending on battery condition and load. (B) Includes a single combination RS-232 and contact-closure port. (C) SU2200XLa models include a separate NEMA 5-15P plug which can be installed in place of the existing plug. (D) Certifications vary by model.

SmartOnline[™] Modular 3-Phase

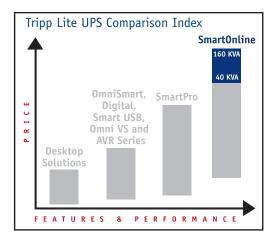
Intelligent True On-Line UPS Systems



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

SmartOnline Modular 3-Phase UPS Systems provide mission-critical equipment with the highest level of power protection. Doubleconversion 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 Modular 3-Phase UPS Systems automatically correct the widest range of incoming voltages of any models in their class. A wider voltage correction range saves battery power and decreases battery wear by up to 40%, reducing battery replacement costs. SmartOnline Modular 3-Phase models provide reliable battery power with zero transfer time to keep networks up and running safely through short blackouts and allow enough time to safely shut down or switch to generator backup during longer ones. In addition, all models stop damaging surges and filter disruptive line noise.

SmartOnline Modular 3-Phase UPS Systems are ideal for protecting critical equipment in computing, networking or telecommunications environments.



TRUE ON-LINE

- ▶ 40 80 kVA (Up to 160 kVA in Parallel)
- ▶ 3-Phase Hardwire (120/208V or 277/480V)
- ► N+1 Modular Architecture
- ▶ 1+1 Parallel Capability with Patented Dual DSP Control
- ► Low THDi for 1:1 Generator Sizing
- Zero Transfer Time, Double Conversion
- Advanced IGBT Rectifier and Inverter Technology with Power Factor Correction (PFC)
- ► Real-Time Log of 500 Events

Save Installation Costs (1:1 Generator Sizing)

SmartOnline Modular 3-Phase UPS Systems include a generatorfriendly design that lowers installation costs. The SmartOnline UPS's high input power factor and Digital Signal Processor (DSP) technology create less than 3% input Total Harmonic Distortion (THDi), enabling a 1:1 sizing of the UPS System to a generator set. Generators are affected by the THDi that a UPS system passes back through its input into the overall power system. If the THDi is high, managers are forced to oversize generators in order to compensate. With the SmartOnline UPS's low THDi, generators run cooler and last longer, allowing managers to save installation costs by installing a generator with a capacity equal to their equipment load (a 1:1 ratio). In addition, low THDi eliminates the need to oversize cables and breakers and eliminates nuisance breaker tripping and overheated transformers.

Save Operating Costs

SmartOnline Modular 3-Phase UPS
Systems include advanced IGBT
inverter technology that provides
the highest efficiency (up to 96%
in economy mode) of any UPS
system in its class. High efficiency
operation lowers UPS system
operating and related cooling
costs and lengthens UPS system
service life. Since inverter
components are smaller, SmartOnline
models also save significant
facility floor space compared to
legacy systems.

Include Additional Availability Features

A manual bypass breaker as well as an automatic bypass function included on SmartOnline Modular 3-Phase UPS Systems ensure the constant availability of connected equipment by safely passing through AC power if the UPS system requires maintenance. In addition, a battery cold-start function (initiated through the control panel) allows you to restart your UPS system and connected equipment during an extended blackout for periodic system access or retrieval of vital data.

Provide Optional Extended Service / Support Programs

Start-Up and On-Site Service Programs are recommended and available separately to enhance the reliability of the installation. Preventative Maintenance Services are also available for added peace of mind.

Provide 100% System Availability

with N+1 Modular Architecture & 1+1 Parallel Capability

N+1 Modular Architecture

100% Availability with N+1 Redundancy

- Multiple, Redundant Power Modules
- Dual, Redundant Controller Power Supplies

All SmartOnline Modular 3-Phase UPS Systems include multiple, self-contained power modules that provide the ultimate level of fail-safe redundancy. In an N+1 configuration, a power module can be hot-swapped (with the load powered) if maintenance is required.



20kVA Redundant Power Module

Modular Architecture Provides N+1 (and Greater) Redundancy

Equipment Load ("N")										
UPS System Model #	20kVA	40kVA	60kVA	80kVA						
SU40K	N+1	N								
SU60K & SU60KTV	N+2	N+1	N							
SU80K & SU80KTV	N+3	N+2	N+1	N						





1+1 Parallel Capability

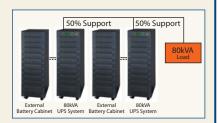
Provides Redundancy

Connect two SmartOnline UPS Systems in parallel (1+1) to provide redundancy that "hardens" the power distribution system. If one UPS is removed or taken offline for maintenance, the second UPS supports the equipment load automatically—without requiring additional programming, like standard legacy systems. SmartOnline UPS Systems are parallel-ready and use a non-proprietary, wall-mounted parallel distribution panel. Patented dual DSP technology provides state-of-the-art parallel control.

Increases Capacity

Connect two SmartOnline Modular 3-Phase UPS Systems in parallel to double the capacity offered to a single equipment load.

Note: UPS systems connected in parallel must have the same capacity and voltage. Parallel connection also requires a wall-mounted parallel tie cabinet.





UPS System Power Module Cabinet

The UPS System's power module cabinet delivers true on-line, pure sine wave power to connected equipment.



Extended Runtime Capability (rear panel access, not shown)

40kVA models include internal batteries. 60kVA and 80kVA models require a stand-alone, hardwired external battery cabinet (available separately from Tripp Lite) to provide battery backup support. All models accept connection of additional external battery cabinets for extended runtime. Contact Tripp Lite for a runtime solution customized for your application.

Advanced Communications Capabilities

A RS-232 Interface

Provides shutdown commands and reporting on a single server.

B Accessory Card Slot

Accepts optional internal SNMPWEBCARD. SNMPWEBCARD provides network interface for monitoring and control via SNMP, Web or telnet, enabling remote reboots, shutdowns and more. Use with optional ENVIROSENSE to monitor temperature



and humidity or to control and monitor alarms and security systems.

C 1+1 Parallel Interface

Allows two UPS systems to support a single equipment load.

Dry-Contact Interface (Including "EPO" Emergency Power Off Function)

Allows remote emergency shutdown of the UPS system. Also allows the UPS system to monitor a variety of input/output conditions, including external battery module conditions.

Hardwire, 3-Phase (4-Wire, wye) Output (rear panel access, not shown)

Connects the power module directly to your equipment or a PDU (power distribution unit).

Hardwire, 3-Phase (4-Wire, wye) Input (rear panel access, not shown) Connects the power module directly to the 3-Phase utility power source.

E Cooling Fans

Keep UPS system at optimal operating temperature, prolonging service life.

Removable Mounting Brackets, Heavy-Duty Casters & Levelers

Provide added mobility and stability during installation.



Removable Mounting Brackets

6 Multiple, Redundant Hot-Swappable 20kVA Power Modules

All SmartOnline Modular 3-Phase UPS Systems include multiple, self-

contained power modules that provide the ultimate level of fail-safe



20kVA Redundant Power Module

redundancy. In an N+1 configuration, a power module can be hotswapped (with the load powered) if maintenance is required.

Bypass Operation A manual bypass breaker as well as

an automatic static



bypass ensure 100% availability of connected equipment by safely passing through AC power if the UPS system requires maintenance.

Short Circuit Protection

Breakers safeguard your equipment, the UPS system and your electrical infrastructure against potential damage due to input or output short circuits and system overloads.

Display & Control Panel

This interface indicates a variety of UPS operational modes and conditions, allowing you to react more rapidly to an alert before your systems are put at risk.

1 LCD Display: lets you access more precise information than provided by LEDs alone. Text and intuitive operational block diagrams communicate a variety of fault/warning and UPS system operational conditions.

Real-Time Event Log Screen (Up to 500 Events Listed)

Event log helps managers decisively react to changing conditions by providing a broader context of UPS operation.

BATTERY OF-07-07 131:17:00 OF-07-07 131:15:17 DUSS STATE: Load on Inverter 07-07-07 131:15:17 Trout Voltage Normal OF-07-07 17:12:15 OF-07-07 17:12:15 OF-07-07 17:12:15 OF-07-07 17:12:15 OF-07-07 17:12:15 OF-07-07 17:12:15 Input Voltage Aboreal 07-07-07 17:12:25 OF-07-07 17:12:25 Input Voltage Aboreal 07-07-07 17:12:25 Input Voltage Aboreal 07-07-07

Dynamic Battery Management Screen

Use the LCD display and control buttons to select optional settings for charge current and battery equalization—lengthening battery service life. Also use the control panel to "cold start" the UPS system.

- (2) LED Set: indicates normal on-line operation, on-battery operation, bypass operation or an input fault condition.
- (3) Inverter On/Off Buttons
- 4 LCD Display Control Buttons
- (5) "EPO" (Emergency Power Off) Button: onsite safety measure (covered to protect against accidental contact) completely shuts down the UPS.

Capacity Minutes) Halt/ Battery Strings (Required for (Hardwire, 50/60Hz (Frequency RS-232 Interface Contact Acces	Specifica	tions									FO
SU40K		Capacity	(Typical Minutes) Half/	Internal Battery Strings	Cabinets (Required for	Voltage (Hardwire, 50/60Hz	Voltage Range (Frequency	"Smart" RS-232	Parallel Interface	Dry Contact	SNMP/Web Accessory Slot(B)
3g, 4-wire (plus ground), wye 163-260 VAC	SmartOnline I	Modular 3-Phase UF	S System Power Mo	dules							
For Customized Runtime Solutions Su60ktv G0,000/48,000 Contact Tripp Lite for Customized Runtime Solutions A B C D E F 277/480 VAC 218-348/ 378-603 VAC Su80kt S0,000/64,000 Contact Tripp Lite for Customized Runtime Solutions A B C D E F 120/208 VAC 94-150/ 1 1 1 1 1 1 1 1 1		40,000/32,000	13/5.5	4	ABCDEF	3ø, 4-wire		1	1	1	1
For Customized Runtime Solutions 3ø, 4-wire (plus ground), wye 378-603 VAC		60,000/48,000	for Customized	_	ABCDEF	3ø, 4-wire		1	1	1	1
for Customized Runtime Solutions (plus ground), wye 163-260 VAC (plus ground), wye 258080KTV 80,000/64,000 Contact Tripp Lite — A B C D E F 277/480 VAC 218-348/ 1 1 1 1 1		60,000/48,000	for Customized	_	ABCDEF	3ø, 4-wire	,	1	1	1	1
		80,000/64,000	for Customized	_	ABCDEF	3ø, 4-wire		1	1	1	1
Runtime Solutions (plus ground), wye		80,000/64,000	for Customized	_	ABCDEF	3ø, 4-wire	,	1	1	1	1
External Battery Cabinets, Internal Battery String and Accessories											

External Battery Ca	abinets, Internal Battery String and Accessories
A BP480V26B	+/- 240 VDC hardwired external battery cabinet. Multiple cabinets can be daisy-chained. Matches UPS cabinet.
BP480V40C	+/- 240 VDC hardwired external battery cabinet. Multiple cabinets can be daisy-chained. Matches UPS cabinet.
C BP480V55	+/- 240 VDC hardwired external battery cabinet. Multiple cabinets can be daisy-chained. 10-year design life.
D BP480V78	+/- 240 VDC hardwired external battery cabinet. Multiple cabinets can be daisy-chained. 10-year design life.
E BP480V103	+/- 240 VDC hardwired external battery cabinet. Multiple cabinets can be daisy-chained. 10-year design life.
F BP480V140	+/- 240 VDC hardwired external battery cabinet. Multiple cabinets can be daisy-chained. 10-year design life.
SURBC2030	240 VDC replacement internal battery string for SU40K only.
SU40KMBPK	External maintenance bypass panel for SU40K only. Wall mount. Kirk Key interlock system prevents sequence of operation errors.
SU60KMBPK	External maintenance bypass panel for SU60K only. Wall mount. Kirk Key interlock system prevents sequence of operation errors.
SU80KMBPK	External maintenance bypass panel for SU80K only. Wall mount. Kirk Key interlock system prevents sequence of operation errors.
SU60KMBPKX	External maintenance bypass panel for SU60KTV only. Wall mount. Kirk Key interlock system prevents sequence of operation errors.
SU80KMBPKX	External maintenance bypass panel for SU80KTV only. Wall mount. Kirk Key interlock system prevents sequence of operation errors.
SUPT40K	Parallel tie cabinet for 1+1 parallel connection of SU40K models only. Wall mount.
SUPT60K	Parallel tie cabinet for 1+1 parallel connection of SU60K models only. Wall mount.
SUPT80K	Parallel tie cabinet for 1+1 parallel connection of SU80K models only. Wall mount.
SUPT60KX	Parallel tie cabinet for 1+1 parallel connection of SU60KTV models only. Wall mount.
SUPT80KX	Parallel tie cabinet for 1+1 parallel connection of SU80KTV models only. Wall mount.
SNMPWEBCARD	Internal SNMP/Web management card (connects UPS system to Ethernet).
ENVIROSENSE	Allows UPS to monitor external temperature/humidity & contact-closure inputs (requires SNMPWEBCARD).

(A) 40kVA models include internal batteries. Backup times will vary depending on battery condition and load. 60kVA and 80kVA models require a stand-alone external battery cabinet (available separately) to provide battery backup support. All models accept connection of additional external battery cabinets for extended runtime. (B) For use with optional internal cards. SNMP/Web management accessory card (model: SNMPWEBCARD) available separately from Tripp Lite.

SmartOnline[™] 3-Phase

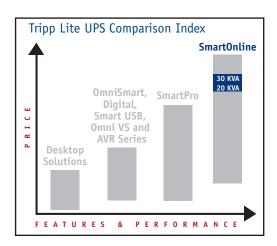
Intelligent True On-Line UPS Systems



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

SmartOnline 3-Phase UPS Systems provide mission-critical 3-phase 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 include a wide incoming voltage tolerance, automatically correcting a wide range of incoming voltages* to save battery power for when it's needed during a blackout. SmartOnline 3-Phase UPS Systems provide reliable battery power with zero transfer time to keep networks up and running safely through short blackouts and allow enough time to safely shut down during longer ones. In addition, they stop damaging surges and filter disruptive line noise.

SmartOnline 3-Phase UPS Systems are ideal for protecting critical equipment in computing, networking or telecommunications environments.



T O W E R U P

TRUE ON-LINE

▶ 20 - 30 kVA

UPS

- ► Small Footprint Cabinet
- ► Front-Panel Battery Access
- ► Zero Transfer Time, Double-Conversion
- ► IGBT Inverter Technology
- ➤ 3-Phase Hardwire Input & Output (120/208V)
- ► Internal Batteries & Extended Runtime Options

Deliver Superior Reliability

SmartOnline 3-Phase UPS Systems provide some of the lowest THD (total harmonic distortion) output available— <3% using IGBT technology—allowing your connected equipment to continuously perform at its peak. In addition, SmartOnline 3-Phase models provide a 3:1 crest factor to safely support a variety of equipment, even equipment with wildly fluctuating power demands.

Provide 100% Availability

A manual bypass switch as well as an automatic bypass function included on SmartOnline 3-Phase UPS Systems ensure the constant availability of connected equipment by safely passing through AC power even if the UPS system requires maintenance.

In addition, a battery cold-start switch allows you to restart your UPS system and connected equipment during an extended blackout for periodic system access or retrieval of vital data.

^{*} Voltage Correction Range: 96-144V/166-250V.

Save Space

SmartOnline 3-Phase UPS Systems feature the smallest footprints in their class. While many competitive solutions require two bulky modules that must be installed side by side, SmartOnline 3-Phase UPS Systems combine power and battery components into a single, small-footprint module. SmartOnline models save valuable facility floor space in every environment.

Simplify Runtime Scalability

In addition to a space-optimized design, SmartOnline UPS Systems include convenient front-panel battery access that simplifies runtime scalability. A robust internal battery capability can be easily extended by installing additional optional internal batteries through the front panel access door.

Room for additional internal battery strings is built into each SmartOnline 3-Phase UPS System—so runtime can be significantly extended without changing the UPS System's space-saving footprint. SU20K3/3 models provide room for two additional internal battery strings. SU30K3/3 models provide room for one additional internal battery string, and SU20K3/3XR5 and SU30K3/3XR5 models provide room for three additional battery strings.

Provide Greater Product Availability

Since SmartOnline 3-Phase UPS
Systems are fully stocked, they
feature the lowest lead time
(between ordering and installation)
in the industry. On average,
SmartOnline 3-Phase UPS Systems
ship within several days compared
to the industry average of 3 to
4 weeks.

Extend Runtime

All models feature a robust internal battery capability. Additional internal batteries can be added to provide extended runtime. If more runtime is required, an optional stand-alone battery compartment can be added and configured with additional batteries. Without enough runtime, businesses stand to lose up to \$50,000 per hour according to a recent survey on the cost of lost productivity for an hour of network downtime.* Locate your planned load and optimum runtime on the chart below.

*	Yankee	Groun

н [Runtime (minutes)	Runtime	(minutes) with	h additional in	ternal battery	strings				
A	Load (Watts)	with included internal battery strings	1	2	3	4	5				
ェ	SU20K3/3 Exten	ded Runtime (with SURBC2	030 internal ba	ttery strings)							
ں	8000	13.0	25.2	36.5	42.0*	61.0*	73.9*				
ш	16000	5.0	10.1	14.9	17.0*	25.5*	31.2*				
Σ	SU20K3/3XR5 Ex	xtended Runtime (with SUR	BC2030 interna	al battery string	gs)						
I L N	8000	42.0	61.0	73.9	87.1	100.5*	114.2*				
	16000	17.0	25.5	31.2	37.0	43.0*	49.1*				
⊃	SU30K3/3 Exten	ded Runtime (with SURBC2	030 internal ba	ttery strings)							
~	12000	13.0	22.0	25.0*	37.1*	45.2*	53.5*				
٥	24000	5.0	8.5	11.0*	14.9*	18.3*	21.8*				
ш	SU30K3/3XR5 Ex	xtended Runtime (with SUR	BC2030 interna	al battery string	gs)						
_	12000	25.0	37.1	45.2	53.5	62.0*	70.7*				
Z W	24000	11.0	14.9	18.3	21.8	25.4*	29.1*				
E X T E	compartment (model #	* The number of additional battery strings exceeds the number of vacant slots in the UPS System's internal battery compartment. An additional, stand-alone battery compartment (model # SUBF2030) will need to be purchased to accommodate the additional battery strings. The SUBF2030 can accommodate up to four battery strings and can be daisy-chained to further extend runtime. For additional extended runtime solutions, call Tripp Lite's Application Specialists at (773) 869-1236.									

Lower Your Cost of Ownership

Lower your cost of ownership with the superior efficiency of SmartOnline 3-Phase UPS Systems. Extremely efficient operation saves money by lowering electricity consumption. As an extra measure of efficiency, SmartOnline 3-Phase models feature a high power density (packing more capacity into a smaller footprint cabinet) which saves valuable facility space.

Provide Optional Extended Service / Support Programs

Start-Up and On-Site Service Programs are recommended and available separately to enhance the reliability of the installation. Preventative Maintenance Services are also available for added peace of mind.

Include Enhanced Communication Capability

SmartOnline 3-Phase UPS Systems include three communications ports, an SNMP slot and a remote EPO jack. PowerAlert software provides power management, monitoring and control locally or remotely through TCP/IP. Intelligent communications allow you to check UPS status (including battery charge level) and AC power status.*

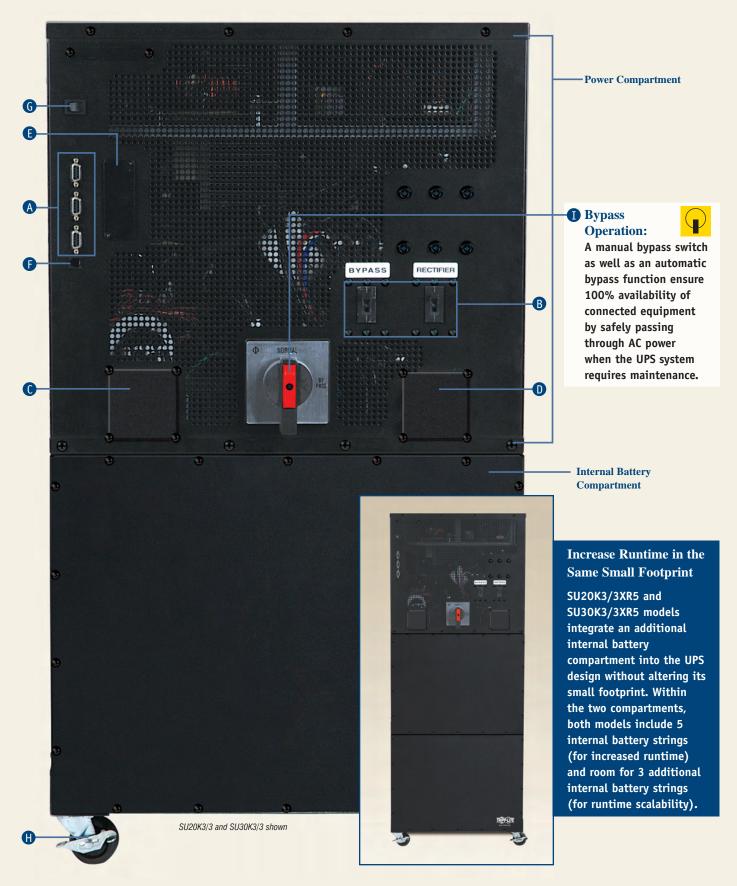
* Additional PowerAlert features: pages 26 and 27.

3-Phase Accessories Ease Deployment

Non-proprietary accessories are available to integrate SmartOnline 3-Phase UPS Systems into your existing infrastructure, including external maintenance bypass panels (with Kirk Key interlock), external battery cabinets and more.

UPS System Rear Panel (Power & Battery Components in One Module)

The UPS System's power components (located within the top half of the unit) deliver true on-line, pure sine wave power to connected equipment. The power components work with internal batteries (located within the bottom half of the unit) to supply connected equipment with battery backup during a blackout. The internal battery compartment includes vacant slots to accept additional battery strings for extended runtime.



Extended Runtime Capability (front panel, not shown)

All models feature a robust internal battery capability.

Additional internal batteries can be added to provide extended runtime. If more runtime is required, an optional, stand-alone battery compartment can be added and configured with additional batteries.

See Extended Runtime Chart on page 21 to locate the perfect SmartOnline 3-Phase model that fits your runtime needs.

A Multiple Server Support

Multiple built-in communication ports simultaneously provide shutdown commands and reporting on multiple servers without the need for accessories.

Short Circuit Protection

Multi-pole breakers safeguard your equipment, the UPS system and your electrical infrastructure against potential damage due to input or output short circuits and system overloads.

Hardwire, 3-Phase (4-Wire, wye) Output

Connects the power module directly to your equipment or a PDU (power distribution unit).

hardwire, 3-Phase (4-Wire, wye) Input

Connects the power module directly to the 3-Phase utility power source.

Accessory Card Slot

Accepts optional internal SNMPWEBCARD or RELAYIOCARD. SNMPWEBCARD provides network interface for monitoring and control via SNMP, Web or telnet, enabling remote reboots, shutdowns and



more. Use with optional ENVIROSENSE to monitor temperature and humidity or to control and monitor alarms and security systems. RELAYIOCARD provides programmable contact closure interface with 6 outputs and 1 input.

F Emergency Power Off

A modular jack allows remote emergency shutdown.

G Battery Cold Start

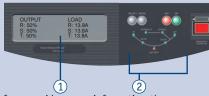
Restart your UPS during a prolonged blackout to utilize its batteries for periodic system access or data retrieval.

Heavy-Duty Casters

Provide added mobility during installation.

Front Panel Display

A front panel combination LCD/LED display indicates a variety of UPS operational modes



and conditions. This interface provides more information than comparable models, allowing you to react more rapidly to an alert before your systems are put at risk.

① LCD Display: lets you access more precise information than provided by LEDs alone. View over 45 separate fault/warning and UPS system operational conditions, including operational mode, alarm/shutdown conditions, input/output voltage/frequency, battery voltage, load percentage and more.

② LED Set: is organized into a flow chart that indicates UPS system operational status, including normal on-line operation, bypass operation (due to fault or overload) or on-battery operation (due to a blackout or severe brownout).

Specifications

											Rol
CUL US NOM	0	Backup Time	Included	Optional	Additional Capacity		Input Communication Ports				
Model #	Output Capacity (VA/Watts)	(Typical Minutes) Half/ Full Load ^(A)	Internal Battery Strings (Quantity)	Internal Battery Strings	for Optional Internal Battery Strings (Quantity)	Input/Output Voltage (Hardwired)	Voltage Range (Frequency 60 Hz)	"Smart" RS-232 (DB9)	Contact Closure (DB9)	AS-400 (DB9)	Accessory Card Slot
SmartOnline 3	-Phase UPS Syst	tems									
≐ SU20K3/3	20,000/16,000	13/5+	2	A	2	120/208 VAC 3ø, 4-wire (plus ground), wye	96-144/ 166-250 VAC	1	1	1	Yes
≐ SU20K3/3XR5	20,000/16,000	42/17+	5	A	3	120/208 VAC 3ø, 4-wire (plus ground), wye	96-144/ 166-250 VAC	1	1	1	Yes
≐ SU30K3/3 ₽	30,000/24,000	13/5+	3	A	1	120/208 VAC 3ø, 4-wire (plus ground), wye	96-144/ 166-250 VAC	1	1	1	Yes
3 SU30K3/3XR5	30,000/24,000	25/11+	5	A	3	120/208 VAC 3ø, 4-wire (plus ground), wye	96-144/ 166-250 VAC	1	1	1	Yes

Internal Battery Pack and Accessories

Α

Α	SURBC2030	240V internal battery string (for all models).
	SUBF2030	Additional, stand-alone battery compartment (for all models). Requires SURBC2030 battery strings. Capacity: 4 strings.
	SU20KMBPK	External maintenance bypass panel (for 20kVA models only). Wall-mount. Three 70A breakers. Kirk Key interlock system prevents sequence of operation errors.
	SU30KMBPK	External maintenance bypass panel (for 30kVA models only). Wall-mount. Three 100A breakers. Kirk Key interlock system prevents sequence of operation errors.
	SNMPWEBCARD	Internal SNMP/Web management card (connects UPS system to Ethernet).
	ENVIROSENSE	Allows UPS to monitor external temperature/humidity & contact-closure inputs (requires SNMPWEBCARD).
	RELAYIOCARD	Programmable contact closure accessory card with 6 output contacts and 1 input contact.
	. Beel offered and	111 1 1111 1 1 1 1 1 1 1 1 1 1 1 1 1 1

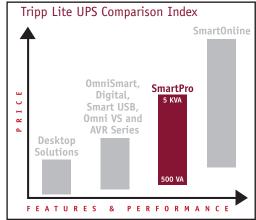
⁺ Backup times are expandable using additional optional internal battery strings (model # SURBC2030, available separately). (A) Backup times will vary depending on battery condition and load.

Complete, up-to-date specifications (including product weight and dimensions) available at www.tripplite.com

Also available: start-up and on-site service programs, interactive UPS System selector guide, extended warranties, owner's manuals and more!

$SmartPro^{\circ}$ Intelligent Line-Interactive UPS Systems





- ▶ 500 5,000 VA
- ► Internal Batteries & Extended Runtime Options
- ► Automatic Voltage Regulation (AVR)

Protect Every Application

SmartPro Tower UPS Systems are available in a wide variety of capacities to protect every size computer application from downtime, damage and data loss due to power problems. SmartPro Tower UPS Systems provide complete protection against all types of power problems, including brownouts, blackouts, surges and line noise. Line-interactive operation—also known as automatic voltage regulation (AVR)—keeps equipment working through low voltage (brownouts) and high voltage conditions indefinitely, without draining battery power. SmartPro Tower UPS Systems provide reliable battery power to keep computers up and running through short blackouts and allow enough time to safely shut down during longer ones. In addition, all AC outlets stop damaging surges and filter disruptive line noise.

Control Individual Outlets

Prioritize the uptime of mission-critical loads during a power failure with Customized Load Management Banks featured on select models. Use PowerAlert to reboot a locked-up computer by cycling the power on and off to select receptacles on the UPS system. You can also program PowerAlert to shut down less important systems during an extended blackout, preserving battery runtime for more critical equipment.

Manage Multiple Servers

Multiple built-in communication ports provide the ability to simultaneously manage multiple servers without the need for accessories. 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.*

Extend Runtime

Select models accept external battery packs to provide extended runtime. Without enough runtime, businesses stand to lose up to \$50,000 per hour according to a recent survey on the cost of lost productivity for an hour of network downtime.* Locate your planned load and optimum runtime on the chart below. * Yankee Group.

-		Runtime (minutes)	Run			with add		
~	Load	with included ´	external battery packs					
	(Watts)	batteries	1	2	3	4	5	
A	SMART750	XLa Extended Runtin	ne (with	BP36V	/42-3U)			
工	250	13	331.6	866.8	1285.7	1692.3	2086.6	
ر	500	5.0	151.6	420.7	639.0	855.3	1068.8	
	SMART150	OXL Extended Runtin	ne (witl	BP36V	/42-3U)			
ш	490	20.4	181.9	398.5	616.7	833.1	1046.7	
ш	980	7.1	77.8	179.1	285.2	392.7	500.5	
Σ	SMART150	OSLTXL Extended Ru	ntime (with BP	236V42-3	3U)		
н	490	16	177.2	388.9	602.3	814.1	1023.3	
_	980	6.8	75.6	174.3	277.9	382.9	488.2	
Z	SMART220	OVSXL Extended Run	ntime (with BP48V60RT3U)					
_	800	19.0	128.5	264.3	403.4	542.9	681.9	
Π	1600	7.0	52.6	113.0	177.3	243.5	310.5	
~	SMART220	ONET Extended Runt	ime (with BP24V70-3U)					
	800	27.0	121.8	229.3	339.7	450.9	562.1	
٥	1600	11.0	N/A	N/A	N/A	N/A	N/A	
	SMART300	ONET Extended Runt	ime (wi	ith BP24	4V70-3U)		
ш	800	33.3	122.6	230.8	341.8	453.6	565.3	
D	1600	13.1	51.5	N/A	N/A	N/A	N/A	
z	SMART300	OVS Extended Runtii	ne (wit	h BP48	V60RT3l	J)		
ш	800	19.7	124.3	256.2	391.5	572.2	662.5	
	1600	7.4	53.4	114.5	179.7	246.6	314.4	
⊥	SMART500	OXFMRXL Extended I	Runtime	e (with	BP48V6	ORT3U)		
×	1820	27.7	63.0	117.9	175.8	235.2	295.2	
ш	3750	10.0	24.4	47.0	71.7	97.6	124.4	
_	0100	10.0	2 1. 1	17.0	****	07.0	12 1. 1	

For additional extended runtime solutions to fit your specific load requirements, use Tripp Lite's interactive UPS Selector Guide at www.tripplite.com/selector/ups, or call Tripp Lite's Application Specialists at (773) 869-1236.

^{*} Additional PowerAlert features: pages 26 and 27.

Feature Focus

A Extended Runtime Capability
Select models feature connectors
that accept optional external
battery packs for additional runtime.
External batteries can be "hot-swapped".
See Extended Runtime Chart on page 24
to locate the perfect SmartPro Tower
model that fits your runtime needs.

B Customized Load Management

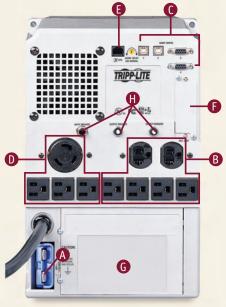
Prioritize the uptime of mission-critical loads during a power failure. Select models feature special receptacles that you control independently through PowerAlert software. Use PowerAlert to shut down less important systems first, preserving battery runtime for more critical equipment.

Multiple Server Control

Up to four built-in communication ports on select models simultaneously provide shutdown commands and reporting on multiple servers without the need for accessories.

D Variety of Output Options

15- 20- and 30-amp receptacles ensure maximum connection flexibility.



SMART3000VS Rear Panel

Emergency Power Off (EPO)

A modular jack on select models allows remote emergency shutdown.

Phone/DSL/Ethernet Surge Protection (Select Models, Not Shown)

Protect Internet-connected or networked computers from damage on a single phone/ DSL/Ethernet line.

Accessory Card Slot

Accepts optional internal SNMPWEBCARD or RELAYIOCARD.



SNMPWEBCARD provides network interface for monitoring and control via SNMP, Web or telnet, enabling remote reboots, shutdowns and more. Use with optional ENVIROSENSE to monitor temperature and humidity or to control and monitor alarms and security systems. RELAYIOCARD provides programmable contact closure interface with 6 outputs and 1 input.

6 Battery Replacement

Tripp Lite UPS batteries will protect equipment for several years with normal use. Most models feature a removable panel which allows for internal battery replacement*. Internal batteries can be "hot-swapped".

Short Circuit Protection

Performance Conditions Displayed

Front panel LEDs alert you to a variety of



performance conditions, including AC line present, automatic voltage regulation, UPS load level and replace battery.

* Tripp Lite offers a complete line of replacement battery cartridges (R.B.C.): visit www.tripplite.com.

Specifications (L) NOM Ontional Nominal Input-Customized "Smart" Phone/DSL/ Power Backun Accessory Cord Output Time (Typical External Output Voltage/ Load Comm. Ports Ethernet Input Battery Management Banks Minutes) Half/Full Load® AC Receptacles NEMA Type USB (DB9) Plug (NEMA) Capacity (VA/Watts) Frequency 60 Hz Surge Protection Card Slot(F) Length (ft) Quantity Model Packs SmartPro UPS Systems 5-15R SMART500RT1U 500/300 120 5-15P 5-15P yes SMART750 750/450 16/5.5 120 6 5-15R 5-15P 5-15P SMART700SER 700/450 20/6 120 6 5-15R 1 120 or 230 (input)/120 (output) SMART700DV 700/450 54/22 6 5-15R yes SMART750XLa 750/500(A) 27/10+ 100/110/120/127 user-selectable AB 8 5-15R 1 line ves 5-15P 20/7 8(D) 5-15R SMART750SLT 750/500 100/110/120 user-selectable 1 line yes 23/8 21/8 5-15R 5-15R SMART1050 1050/705 120 6 5-15P SMART1050SLT 100/110/120 user-selectable 5-15P 1050/650 8 1 line ves SMART1500 1500/980 20/7 120 5-15R 1 5-15P 6 100/110/120 user-selectable 5-15R 5-15P SMART1500SLT 1500/900 22/8 8 1 line yes CD SMART1500XL 1500/980 20/7 +120 6 5-15R 1 5-15P SMART1500SLTXL 1500/980 16/7 +CD 5-15R 5-15P 120 8 1 line 1 1 yes 6 3 2200/1600 7 (5-15R), 2 (5-15/20R) 2 5-20P(G) SMART2200VS 19/7 120 8 yes 5-20P(G) 2200/1600 SMART2200SLT 13/5 120 6 (5-15/20R) & 1 (L5-20R) yes 10 3 2 SMART2200VSXL 2200/1600 19/7+ 120 7 (5-15R), 2 (5-15/20R), 2 5-20P 8 EF 1 (L5-20R) ΑВ SMART2200NET 2200/1700 27/11+ 120 6 5-15R 2 3(E) 5-15P(G) 8 2 SMART3000VS 3000/2250 14/4+ EF 120 10 7 (5-15R), 2 (5-15/20R), 3 2 L5-30P(G) 8 yes 1 (L5-30R) AB SMART3000NET 120 4 (5-15R), 4 (5-15/20R) 2 3(E) 3000/2400 23/7 +8 15-30P 10 SMART3000SLT 3000/2250 10/3.5 120 6 (5-15/20R) & 1 (L5-30R) L5-30P 10 yes SMART5000XFMRXI F 208 (In); 208 & 120 (Out) 5000/3750® 20/8.5 +11 8 (5-15/20R), 2 (L6-20R), L6-30F 10 yes 1 (L6-30R) 208 (In); 208 & 120 SMART5000TEL3U 5000/3750(B) 20/8.5 5 2 (5-15R), 2 (L6-20R), 2(H) L6-30P 10 ves (600VA max.) Out 1 (L6-30R) External Battery Packs and Accessories BP24V28-2U 24V external battery pack and cable, 2U. Not expandable. RED/BLACK 2-point connector. BP24V70-3U 24V external battery pack and cable, 3U. Expandable. RED/BLACK 2-point connector. 36V external battery pack and cable, 2U. Not expandable. GREY 2-point connector. 36V external battery pack and cable, 3U. Expandable. GREY 2-point connector. BP36V15-2U BP36V42-3U BP48V24-2U 48V external battery pack and cable. Tower or 2U rack. Not expandable. BLUE 2-point connector BP48V60RT3U 48V external battery pack and cable. Tower or 3U rack. Expandable. BLUE 2-point connector. SNMPWEBCARD Internal SNMP/Web management accessory card (connects compatible UPS systems to Ethernet) ENVIROSENSE Allows UPS to monitor external temperature/humidity and contact-closure inputs (requires SNMPWEBCARD) RELAYIOCARD Programmable contact closure accessory card with 6 output contacts and 1 input contact. Tower kit with 2 adjustable base stands—2U to 9U—(for SMART5000XFMRXL and SMART5000TEL3U models) 2-9USTAND 2POSTRMKITWM Horizontal mounting rails for 2-post rackmount installation (for SMART5000XFMRXL and SMART5000TEL3U models)

⁺ Backup times are expandable using external battery packs. (a) These models can be set to match the UPS System's output voltage to the input voltage available at the wall outlet. Output capacity varies depending on voltage selection. (a) SMART5000XFMRXL and SMART5000TEL3U models are limited to provide 4500VA output with included plug, but will supply 5000VA output with user-supplied 50A plug. (b) Backup times will vary depending on battery condition and load. (a) SMART5000TEL3U models are limited to providing 540VA output through its 120V receptacles (or 600VA with user-supplied 50A plug). (b) Backup times will vary depending on battery condition and load. (a) SMART5000TI features one "surge-only" receptacles designed for printers. SMART500ELT features four "surge-only" receptacles designed for printers and peripherals. (b) These models include a single RS-232 DB9 port and two contact-closure DB9 ports. (c) Accessory card slot for optional SNMPWEBCARD or RELAYIOCARD. (a) These models include an additional plug (SMART200VS: 5-15P; SMART2200SLT: 5-15P; SMART2200SLT: 5-15P; SMART3000VS: 5-20P) which can be installed in place of the existing plug. Installing the additional plug would change the output capacity. (b) SMART5000XFMRXL and SMART5000TEL3U include an RS-232 DB9 port and a relay contact-closure DB9 port. (c) Certifications vary by model.

PowerAlert Software



Monitors & Controls up to 250 UPS Systems or PDUs, plus up to 250 ENVIROSENSE modules

- Software-Only Solution Requires No Additional Hardware or Licenses
- Available FREE—CD Included or Web Download

PowerAlert software now supports Windows® and Linux® platforms!

PowerAlert software monitors and controls power for up to 250 UPS systems or PDUs and the computers and equipment that they support. Since PowerAlert is a FREE, software-only solution, it saves network managers significant installation costs compared to competitive solutions that require additional hardware or license purchases.* Using JAVA and SNMP standards, PowerAlert simplifies power management for every network—from a single, local server to a large, global enterprise. PowerAlert allows managers to centrally monitor every UPS and PDU on their network. In addition, PowerAlert allows users to set parameters for graceful, automatic system shut down in the event of an extended blackout.

* FREE PowerAlert CD included with SmartPro and SmartOnline UPS systems. FREE download available at www.tripplite.com.

Reduces Deployment Time

• Mass Configuration of Devices

PowerAlert saves time and money by allowing managers to mass-configure multiple remote device settings from a single location.

• Device Auto-Discovery

Managers can set PowerAlert to auto-discover UPS and PDU devices in specific network segments or IP address ranges.

Reduces Troubleshooting Time

Alarm Log

PowerAlert speeds up alarm resolution by pooling all network alarms into a single, sortable easy-to-read list. Alarm entries feature intuitive color coding, including white (normal), yellow (warning) and red (critical).

• "Recommended Action" Messaging

PowerAlert takes the guesswork out of how to respond to alarms. When managers select a device from the Network Management Screen, the device's real-time power status is displayed along with the alarm's "cause" and recommended "response."



Tripp Lite's PowerAlert software, version 12.5, has tested compatible with Cisco CallManager, versions 4.0 and 4.1, Cisco 7600 Series Routers, 7500 Series Routers and Catalyst 65XX Layer 3 Switch. Tripp Lite PowerAlert software, version 12, has tested compatible with Cisco CallManager, versions 3.3(4)-MCS and 4.0(2)-MCS. Go to www.tripplite.com/logodisclaimer for details.

Simplifies Network Power Management

SNMP Control

Any UPS connected to PowerAlert via a USB or serial cable can now be monitored via SNMP—without an internal SNMPWEBCARD and its additional IP address. PowerAlert's built-in SNMP agent can make even a basic desktop UPS a monitored device on your network, visible to the PowerAlert NMS or any third-party NMS such as HP OpenView.

• Alarm Notification

PowerAlert keeps managers continuously apprised of network power conditions through emails and SNMP traps, enabling them to proactively manage power problems before they affect productivity.

Individual Outlet Control

PowerAlert allows managers to reboot locked devices or preserve runtime for more critical equipment by remotely controlling the outlet power of UPS and power distribution units that offer outlet control capability. Select UPS and PDU devices can also be configured to perform custom, sequential startup and shutdown sequences.

Redundant UPS System Management

PowerAlert is smart enough to manage multiple UPS systems connected to a single load. For example, when two UPS systems are connected to support two power supplies on a server, PowerAlert is typically configured to gracefully shut down the server only after battery power is exhausted on both UPS systems.

Network Shutdown Commands

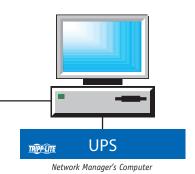
When a UPS communicates with PowerAlert software or via internal SNMPWEBCARD, other computers on the network may also be dependent on the condition of the UPS. Any networked computers with PowerAlert Network Shutdown Agent installed and configured can listen for an outage and automatically shut down before UPS battery power is exhausted. PowerAlert can also execute custom scripts upon any alarm condition.

• Convenient Web-Browser Access

When the internal SNMPWEBCARD is used, network managers can access its management interface from any networked computer via a secure, password-protected browser session (HTTP or HTTPS).

PowerAlert's Power-Management Architecture

Centralized Power Management



Supported by Single UPS System

Economy Mode Control Manage the energy-saving economy mode settings of SmartOnline UPS Systems in real time, or define a

schedule to switch between economy

mode and full-time double conversion

automatically.



PowerAlert Network Management Screen

PowerAlert allows managers to monitor and control up to 250 devices from a single interface. Click on any device listing to open up to four device power status screens at a time.

Real-Time Power Status Screens

NMS Management

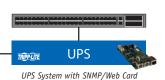
Managers can choose to access PowerAlert through a third-party network management system (NMS).



SNMP Power Management

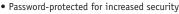






Internal SNMP/Web Card

Using Tripp Lite's Internal SNMP/Web Management Cards (Model # SNMPWEBCARD), managers can make UPS systems and select switched PDUs fully manageable (monitored and controlled) nodes on their network.



- Flash-upgradeable for enhanced manageability
- Real-time clock and NTP-compatibility

Communicate with SNMPWEBCARD through:







3rd-Party SNMP Tool

Telnet

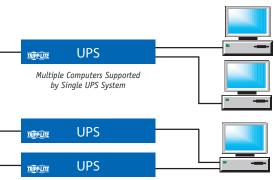
Web Browser (HTTP/HTTPS)

Environmental Sensor

Using Tripp Lite's Environmental Sensor (Model # ENVIROSENSE, available separately) and SNMPWEBCARD, managers can monitor external temperature/ humidity and contact-closure inputs.



Local Power Management



Redundant Protection: Single Computer Supported by Multiple UPS Systems

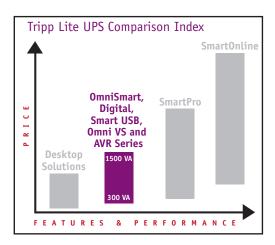


Real-Time Power Status Screen

Managers can view power events in real time, responding to power problems before they affect network performance, and also configure shutdown and alarm settings.

OmniSmart™, Digital, Smart USB, Omni VS and AVR Series Line-Interactive UPS Systems





- ▶300 1,500 VA
- Automatic Voltage Regulation (AVR)
- Phone/DSL, Ethernet & Coaxial Surge Protection Options
- ► Extended Runtime Option

Protect Every Application

OmniSmart, Digital, Smart USB, Omni VS and AVR Series UPS Systems are available in a wide variety of capacities to protect every size computer application from downtime, damage and data loss due to power problems. These UPS Systems provide complete protection against all types of power problems, including brownouts, blackouts, surges and line noise. Line-interactive operation—also known as automatic voltage regulation (AVR)—keeps equipment working through low voltage (brownouts) indefinitely, without draining battery power. OmniSmart, Digital, Smart USB, Omni VS and AVR Series UPS Systems provide reliable battery power to keep computers up and running through short blackouts and allow enough time to safely shut down during longer ones.

Digital UPS Systems include an LCD display that shows incoming power conditions in real time. Monitor input voltage, battery and load status and more at a glance. The LCD display includes a dimmer switch and can be rotated for easy viewing in any application.

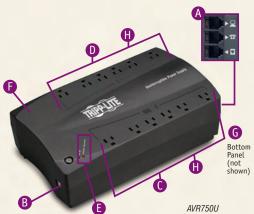
Protect Systems On Phone/DSL, Ethernet or Coaxial Lines

Select UPS Systems include surge-protected jacks that safeguard equipment against damaging surges traveling on the phone/DSL, Ethernet or coaxial lines. In addition to protecting equipment against surges, reliable battery backup power maintains Internet, network or coaxial connections during brief blackouts.

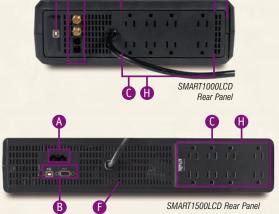
Automatically Shut Down Unattended Systems

All models feature at least one built-in communication port. Use with included cabling and PowerAlert software (available as a FREE Web download) to automatically save open files and shut down unattended equipment during an extended blackout. PowerAlert software waits for a user-specified length of time (during which on-screen notifications are displayed) before safely shutting down connected equipment. SMART550USBWD model also includes WatchDog Service Monitoring/Rebooting Software to automatically reboot locked-up or poorly performing system service applications—perfect for kiosk, point-of-sale or other unattended applications.

Feature Focus







A Phone/DSL, Ethernet & Coaxial Surge Protection

> Protect computers from damage on the phone/ DSL, Ethernet or coaxial line with surge-protected jacks featured on many Tripp Lite UPS Systems.

- 1-Line (phone/DSL & Ethernet): Protects one device using one phone/DSL or Ethernet line.
- 1-Line (phone/DSL): Protects one device using one phone/DSL line.
- 1-Line (phone/DSL with built-in splitter):* Protects two devices sharing one phone/DSL line. Saves the hassle of unplugging devices to share a single line.
- 1-Line (coaxial): Protects one device using one cable modem, DSS satellite, cable TV or antenna line. Connectors are gold "F" style and are digital-capable.
- * AVR750U and AVR900U models only.

B Automatic Data Protection

At least one built-in communication port connects all models to a PC or workstation. Use with FREE PowerAlert software* and included cabling to automatically save open files and shut down equipment during an extended blackout.

- * Available FREE as a Web download.
- C Battery-Supported and Surge-Protected Receptacles (for Computers and Monitors) All models include receptacles that provide reliable battery support for computers and monitors during a blackout as well as complete surge suppression and line noise filtering.
- D Surge-Only Protected Outlets (for Printers and Peripherals) Select models include receptacles that provide complete surge suppression and line noise filtering for printers and peripherals.

Performance Conditions Displayed

All UPS Systems feature either LEDs or an LCD display to alert you to potential power problems before they affect your equipment. The LCD display featured on



Rotatable LCD Display

Digital models includes a dimmer switch and can be rotated for easy viewing, regardless of whether the UPS is placed in a horizontal or vertical ("tower") position.

- Space-Saving Cabinets
- **Battery Replacement Access**
- Widely-Spaced Outlets
- Extended Runtime Capability

Specifications

B BP24V15RT2U

(I) NOM (II)							RoHS
	Output Capacity	Backup Time (Typical	Optional External	AC Receptacles		Phone/DSL, Ethernet or	LEDs or LCD
Model	(VA/Watts)	Minutes) Half/Full Load(A)	Battery Packs	Quantity (NEMA 5-15R)	Comm. Ports	Coaxial Surge Protection	Display ^(B)
OmniSmart UPS System							
OMNISMART300	300/180	32/14	_	3	1 USB	1 line (Phone/DSL)	В
OMNISMART500	500/300	17/5	_	6 (3 UPS/surge & 3 surge-only)	1 USB	1 line (Phone/DSL)	В
OMNISMART700	700/450	22/7	_	6 (3 UPS/surge & 3 surge-only)	1 USB & 1 DB9	1 line (Phone/DSL & Ethernet)	В
OMNISMART1050	1050/705	23/7	_	6	1 USB	_	A
OMNISMART1400	1400/940	24/8	_	6	1 USB	_	A
Digital UPS Systems							
OMNI650LCD	650/350	11/3.5	_	8 (4 UPS/surge & 4 surge-only)	1 USB	_	D (LCD)
OMNI900LCD	900/475	10/3	_	8 (4 UPS/surge & 4 surge-only)	1 USB	_	D (LCD)
SMART1000LCD	1000/500	9/3	_	8 (4 UPS/surge & 4 surge-only)	1 USB	1 line (Phone/DSL) & 1 line (Coax)	D (LCD)
SMART1200LCD	1200/700	12/4	_	8	1 USB & 1 DB9	1 line (Phone/DSL & Ethernet)	D (LCD)
SMART1500LCD	1500/900	13/3.5	_	8	1 USB & 1 DB9	1 line (Phone/DSL & Ethernet)	D (LCD)
Smart USB UPS System	S						
SMART550USB	550/300	17/5	_	6 (3 UPS/surge & 3 surge-only)	1 USB	1 line (Phone/DSL)	В
SMART550USBWD(C)	550/300	17/5	_	6 (3 UPS/surge & 3 surge-only)	1 USB	1 line (Phone/DSL)	В
SMART750USB	750/450	11/3	_	6 (3 UPS/surge & 3 surge-only)	1 USB	1 line (Phone/DSL & Ethernet)	В
Omni VS Series UPS Sys	stems						
OMNIVS800	800/475	11.5/3.5	_	7 (6 UPS/surge & 1 surge-only)	1 USB	1 line (Phone/DSL & Ethernet)	В
OMNIVS1000	1000/500	18/7	_	8 (6 UPS/surge & 2 surge-only)	1 USB	1 line (Phone/DSL & Ethernet)	В
OMNIVS1500	1500/940	8.5/4	_	8 (6 UPS/surge & 2 surge-only)	1 USB	1 line (Phone/DSL & Ethernet)	A
OMNIVS1500XL	1500/940	14/5+	A B	8 (6 UPS/surge & 2 surge-only)	1 USB	1 line (Phone/DSL & Ethernet)	Α
AVR Series UPS System	S						
AVR550U	550/300	10/3	_	8 (4 UPS/surge & 4 surge-only)	1 USB	1 line (Phone/DSL)	C
AVR750U	750/450	11/4	_	12 (6 UPS/surge & 6 surge-only)	1 USB	1 line (Phone/DSL)	С
AVR900U	900/480	10/2.5	_	12 (6 UPS/surge & 6 surge-only)	1 USB	1 line (Phone/DSL)	С
External Battery Packs							
BP24V28-2U	24V external b	pattery pack and cable. Tower	or 2U rack. Not exp	pandable. Small RED/BLACK conne	ector.		

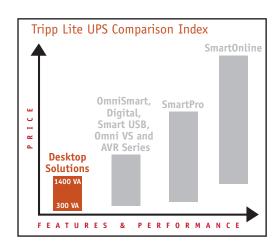
24V external battery pack and cable. Tower or 2U rack. Not expandable. Small RED/BLACK connector. Common specifications for all UPS systems: 120 VAC (60 Hz) nominal input/output in line mode. 6 ft. power cord with NEMA 5-15P plug. + Backup times are expandable using an external battery pack. (A) Backup times will vary depending on battery condition and load. (B) LEDs: A (AC Line Voltage, On Battery, Battery Low/Replace, Automatic Voltage Regulation, UPS Load); B (AC Line Voltage, On Battery, Battery Low/Replace, UPS Load); C (On/Off & Overload/Check Battery). D (LCD Display includes Input Voltage Meter, Battery Capacity Meter, AVR Icon, Battery Charge/Replace Icon, On Battery Icon and Fault Icon). (© Includes Watchdog Software. (9) Certifications vary

TRIPP-LITE TOWER, LOW-PROFILE & UNDER-MONITOR UPS

Cost-Effective Desktop Solutions

Standby UPS Systems





- ▶ 300 1,400 VA
- Phone/DSL & Ethernet Surge Protection **Options**
- ► Space-Saving Cabinets: Tower (small footprint), Low-Profile & Under-Monitor

Protect Every Application

Designed for desktop applications, Internet Office°, BC Pro° and BC Personal UPS Systems are available in a wide variety of capacities to protect every size computer from downtime, damage and data loss due to power problems. Internet Office, BC Pro and BC Personal UPS Systems provide complete protection against all types of power problems, including brownouts, blackouts, surges and line noise. Internet Office, BC Pro and BC Personal UPS Systems provide reliable battery power to keep computers up and running through short blackouts and brownouts and allow enough time to safely shut down during longer ones.

Protect Internet-Connected & Networked Systems

Computers connected to the Internet or Ethernet require additional protection against damaging surges traveling on phone/DSL or network lines. Select Internet Office, BC Pro and BC Personal UPS Systems include surge-protected jacks which safeguard modems and other communication hardware. In addition to protecting your equipment against surges online, reliable battery backup power maintains your Internet or network connection during brief blackouts.

Protect the Planet & Save Money

See back cover for more information.

ECO Series UPS Systems use less electricity than conventional models, reducing your costs and your environmental impact:

- Superior power efficiency (up to 99%) conserves energy around
- ECO energy saver feature automatically turns off idle peripherals when your computer is turned off or in standby mode.*
- Earth-friendly design and recyclable materials minimize hazardous substances and waste.
- USB connection required.

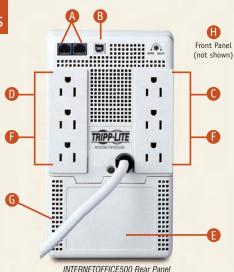
Automatically Shut Down Unattended Systems

Select models feature a built-in communication port. Use with included cabling and PowerAlert software (available as a FREE Web download) to automatically save open files and shut down unattended equipment during an extended blackout. PowerAlert software waits for a user-specified length of time (during which on-screen notifications are displayed) before safely shutting down connected equipment.





Feature Focus





A Phone/DSL & Ethernet Surge Protection

Protect Internet-connected or networked PCs from damage on the Ethernet and/or phone/ DSL line with surge-protected jacks featured on many Tripp Lite UPS Systems.

- 1-Line (phone/DSL & Ethernet): Protects one device using one phone/DSL or Ethernet line.
- 1-Line or 2-Line* (phone/DSL): Protect devices using phone/DSL lines.
- 1-Line (phone/DSL with built-in splitter):** Protects two devices sharing one phone/DSL line. Saves the hassle of unplugging devices to share a single line.
- * INTERNETOFFICE500 model only. ** INTERNET750U model only.

B Automatic Data Protection

Built-in communication port connects select models to a PC or workstation. Use with FREE PowerAlert software* and included cabling to automatically save open files and shut down equipment during an extended blackout.

* Available FREE as a website download.

© Battery-Supported and Surge-Protected Receptacles (for PCs and Monitors)

All models include receptacles that provide reliable battery support for PCs and monitors during a blackout as well as complete surge suppression and line noise filtering.

D Surge-Only Protected Outlets (for Printers and Peripherals)

Select models include receptacles that provide complete surge suppression and line noise filtering for printers and peripherals. These unique receptacles allow you to connect and protect peripherals without overloading the UPS system and diverting precious battery support away from your computer.

E Battery Replacement Panel

Tripp Lite UPS batteries
will protect equipment
for several years with
normal use. Select
models feature a
removable panel which allows for internal
battery replacement.*

* Available on all models except TM500. Tripp Lite offers a complete line of replacement battery cartridges (R.B.C.); visit www.tripplite.com.

F Widely-Spaced Outlets

Select models feature outlets that accept multiple transformers without blocking access to other receptacles.*



* Available on all models except TM500, BCPERS300 & BCPERS0NAL450.

G Space-Saving Cabinets

All models feature space-saving cabinets. Select models feature low-profile



TM500 pictured.

cabinets or under-monitor cabinets with individual outlet switches.

H Performance Conditions Displayed

All UPS Systems feature LEDs to alert you to potential power problems

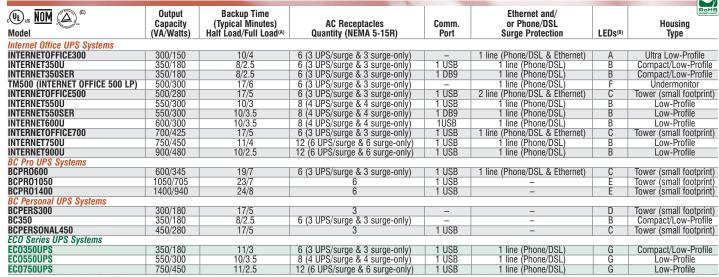


before they affect your equipment.

Energy-Saving Outlets (not shown)

ECO Series UPS Systems include special energy-saving outlets (ECO350UPS has 2; ECO550UPS has 3; ECO750UPS has 4). The UPS system automatically turns off the ECO outlets when it detects that your computer is turned off or in standby mode. (USB connection required.)

Specifications



Common specifications for all UPS systems: 120 VAC (60 Hz) nominal input/output in line mode. 6 ft. power cord with NEMA 5-15P plug. (A) Backup times will vary depending on battery condition and load. (B) LEDs: A (AC Line Voltage, On Battery, Battery Low/Replace, UPS Load, Building Wiring Fault); B (On/Off & Overload/Check Battery); C (AC Line Voltage, On Battery, Battery Low/Replace, UPS Load); F (AC Line Voltage, On Battery, Battery Low/Rep

31



- ▶ Built-In, Faraday-Shielded **Isolation Transformer**
- ► Medical-Grade (UL 60601-1) Models for Healthcare **Applications**
- Commercial-Grade Models for Retail/P.O.S. and Network **Applications**
- Extended Runtime Option

Combine Full-Isolation & **UPS** Protection

Tripp Lite Full-Isolation UPS Systems feature built-in, Faraday-shielded isolation transformers, providing superior filtering of potentially disruptive line noise. In addition, all models provide complete protection against all types of power problems. Line-interactive operation—also known as automatic voltage regulation (AVR)—keeps equipment working through low voltage (brownouts) indefinitely, without draining battery power. Reliable battery power keeps computers up and running through short blackouts and allows enough time to safely shut down during longer ones. In addition, all AC outlets stop damaging lightning and surges.

Provide Models for a Variety of Applications

Medical-Grade models reduce the cumulative shock potential (leakage current) of connected healthcare equipment as low as 100μA—providing UL 60601-1 compliance. All Medical-Grade models feature hospital-grade plug and receptacles and are designed for use both inside and outside of patient-care areas. Commercial-Grade models are used in retail/P.O.S. and network applications because they reduce data errors and audio/video distortion by delivering a clean signal-reference ground.

Specifications

	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLU				N. C.			RoHS
cUL us (C)	Output Capacity (VA/Watts)	Backup Time (Typical Minutes) Half/Full Load ^(A)	Optional External Battery Packs	Nominal Input-Output Voltage/ 60 Hz Frequency	AC Receptacles Quantity (NEMA Type)	Communication Ports	Phone/DSL Surge Protection	Input Plug (NEMA)
Medical-Grade (UL 60	0601-1) UPS Sys	tems with Hospital-Grad	e Plug and Recept	acles				
OMNISMART350HG	330/225	46/18	_	120	4 (5-15RHG) ^(B)	1 DB9	2 line	5-15PHG ^(B)
SMART700HG	700/450	42/18	_	120	4 (5-15RHG)(B)	1 DB9 & 1 USB	_	5-15PHG ^(B)
⇒SMART1200XLHG	1000/750	34/16+	AB	120	4 (5-15RHG)(B)	1 DB9 & 1 USB	_	5-15PHG ^(B)
Commercial-Grade U	PS Systems							
OMNI500ISO	500/300	11/5	_	120	3 (5-15R)	1 USB	_	5-15P
OMN1750ISO	750/500	31/13	_	120	6 (5-15R)	1 USB	_	5-15P
OMNI1000ISO	1000/700	24/8	_	120	6 (5-15R)	1 USB	_	5-15P
Model	Description							
External Battery Pack								
A BP36V15-2U	36V external ba	attery pack and cable, 2U.	Not expandable. GF	REY 2-point connector.				
BP36V42-3U	36V external ba	ttery pack and cable, 3U.	Expandable. GREY	2-point connector.				

Common specifications for all UPS systems: 120 VAC (60 Hz) nominal input/output. 6 ft. power cord. (A) Backup times will vary depending on battery condition and load. (B) Hospital-grade receptacles and plug.

Complete, up-to-date specifications (including product weight and dimensions) available at www.tripplite.com

Also available: interactive UPS System selector guide, extended warranties, owner's manuals and more!

Desktop KVM Switches





- ► Control Up to 4 PCs or Servers
- ► For Small-to-Medium Office Applications
- ► Support Wireless Keyboards & Mice
- ► PS/2 & USB Compatible Options

Deliver Economical, Feature-Rich Solutions

Tripp Lite's Desktop KVM Switches allow users to control up to four PCs or servers with a single keyboard/monitor/mouse console. Compact, desktop designs save space in any environment. Select Desktop KVM Switches also offer wireless keyboard/mouse support.

Enhance Connectivity Support

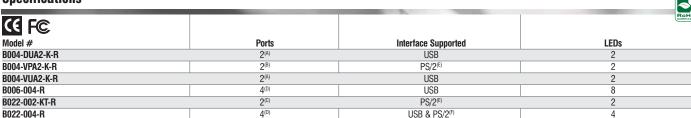
Tripp Lite's Desktop KVM Switches are compatible with USB and PS/2 interfaces depending on the model and the KVM Cable Kits and adapters used. A variety of all-in-one USB and PS/2 KVM Cable Kits up to 25-feet in length are available and necessary to connect each PC or server to the KVM Switch. Select models include KVM Cable Kits for added convenience. A KVM Console Extender is also available to control multiple computers from a remote location.

Simplify Operation

Plug-and-play setup requires no software. Hot-pluggable capability allows addition or removal of computers without powering down the KVM Switch or other computers. Easily switch between CPUs by using keyboard hot keys, software or port selection buttons on the KVM Switch.* Auto-scanning function on select models automatically sequences through all of the active KVM Switch ports, allowing users to monitor multiple tasks simultaneously. Select 2-Port KVM Switches include speaker and microphone connections that allow sharing of audio components between systems.** In addition, an audio locking function allows for listening to one PC while switching between systems.** Tripp Lite's Desktop KVM Switches are compatible with all major operating systems and support most keyboards and mice. Crystal clear video transmission provides connected monitor with optimal video resolution.

* 4-Port USB KVM Switch (model: B006-004-R) does not support hot key functions. 2-Port KVM Switches (models: B004-DUA2-K-R, B004-VUA2-K-R and B004-VPA2-K-R) include software for switching between CPUs. ** Included on 2-Port KVM Switches (models: B004-DUA2-K-R, B004-VUA2-K-R and B004-VPA2-K-R).

Specifications



(A) Includes two USB KVM Cable Kits with audio connectors. (©) Includes two PS/2 KVM Cable Kits with audio connectors. (C) Includes two PS/2 KVM Cable Kits. (D) Requires one KVM Cable Kit for each CPU connected. (E) Also USB compatible with optional B015-000 adapter. (F) Both USB and PS/2 compatible depending on optional KVM Cable Kits or adapters used.

One Cable Kit is required for each CPU connected, visit www.tripplite.com for complete list of KVM Cable Kits (up to 25-ft. long) and Adapters.

Complete, up-to-date specifications (including product weight and dimensions) available at www.tripplite.com
Also available: interactive cable selector guide, owner's manuals and more!

1U Rackmount KVM Switches



Compact, Innovative Design

Specifications

B042-008

B042-016

Tripp Lite's rackmount KVM switches allow users to control multiple computers from a single console (keyboard, mouse and display). KVM switches are available in two different configurations: a KVM switch alone* or a KVM switch that includes a built-in console. Console KVM switches include a full-size keyboard, touch pad and color LCD monitor. The console folds like a laptop and slides into a 1U rack drawer, providing compact storage and easy access without compromising control features.

1U KVM Switch

1U KVM Switch

8

16

- ▶ With or Without Built-In Consoles
- ▶ With or Without Built-In IP Access
- ▶ 4, 8 or 16 Ports in 1U

Remote Monitoring & Control

Select rackmount KVM switches include built-in IP access. Most KVM switches without built-in IP access can be monitored and controlled via dial-up, Internet or LAN with the addition of the optional B050-000 IP Remote Access Unit.

Scalability, Security & Compatibility

NetDirector™ KVM Switches can control up to 512 computers by daisy-chaining or cascading additional KVM switches. A two-level password accommodates up to four distinct user accounts and an administrator account. No software installation is required, guaranteeing that KVM switches will not degrade server performance, compatibility or reliability.





120(

Add B050-000

Add B050-000

Console KVM switches fold and slide into a 1U rack drawer.

Yes

CE FC			LCD	Interface	On-Screen	Maximum CPUs	
Model #	Ports	Description	Monitor	Supported ^(A)	Display	Supported	IP Access
Standard 1U Rackmou	nt KVM Switch	ies					
B004-008	8	1U KVM Switch	_	USB & PS/2	No	8	Add B050-000
B007-008	8	1U KVM Switch	_	USB & PS/2	Yes	512 ^(C)	Add B050-000
NetDirector 1U Rackm	ount KVIM Swi	tches					
B020-008-17	8	1U Console KVM Switch	17 in.	USB & PS/2	Yes	504 ^(B)	Add B050-000
B020-008-17-IP	8	1U Console IP KVM Switch	17 in.	USB & PS/2	Yes	64 ^(C)	Built-In
B020-016-17	16	1U Console KVM Switch	17 in.	USB & PS/2	Yes	512 ^(B)	Add B050-000
B020-016-17-IP	16	1U Console IP KVM Switch	17 in.	USB & PS/2	Yes	128 ^(C)	Built-In
B022-016	16	1U KVM Switch	_	USB & PS/2	Yes	512 ^(B)	Add B050-000
NetController™ 1U Ra	ckmount KVIVI	Switches					
B040-008-19	8	1U Console KVM Switch	19 in.	USB & PS/2	Yes	120 ^(D)	_
B040-016-19	16	1U Console KVM Switch	19 in.	USB & PS/2	Yes	128 ^(D)	_
B042-004	4	1U KVM Switch	_	USB & PS/2	Yes	116 ^(D)	Add B050-000

USB & PS/2

USB & PS/2

All models include mounting hardware to fit standard 19-inch racks. (A) Interface compatibility depends on cable kits or adapters used (sold separately). (B) Requires additional B022-016 KVM switches. (C) Requires additional B007-008 KVM switches. (D) Requires additional B042-series KVM switches.

One cable kit is required for each CPU connected. Visit www.tripplite.com for a complete list of KVM cable kits and adapters.

Complete, up-to-date specifications (including product weight and dimensions) available at www.tripplite.com Also available: interactive cable selector guide, owner's manuals and more!

^{*} Models without a console require a separate keyboard, mouse and display for complete functionality.

1U Rackmount Cat5 KVM Switches



Provide Single- or Multi-User Support

NetDirector™ Matrix 1U Rackmount Cat5 KVM Switches allow up to 8 simultaneous, independent users to control multiple computers. Console and server interface modules connect the KVM switches to each user's console and each connected computer. Interface modules can be placed up to 500 ft. from the KVM switches using Cat 5/5e patch cables.

NetCommander™ 1U Rackmount Cat5 KVM Switches are cost-effective Cat5 KVM switches for single users. They allow a user to control multiple computers from a single console. Server interface modules connect the KVM switches to each server up to 33 ft. away using Cat 5/5e patch cables.

- ▶ With or Without Built-In IP Access
- ► Single-User and Multi-User Options
- ▶ 8, 16 or 32 Ports in 1U

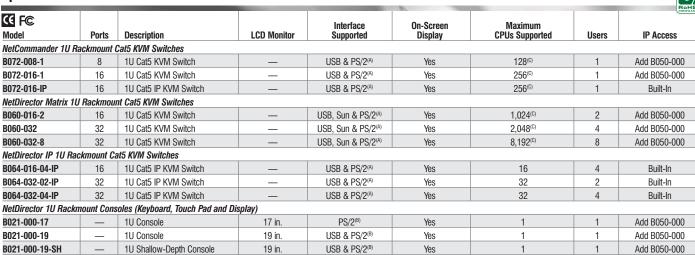
Remote Monitoring & Control

Select rackmount KVM switches include built-in IP access. Most KVM switches without built-in IP access can be monitored and controlled via dial-up, Internet or LAN with the addition of the optional B050-000 IP Remote Access Unit.

Scalability, Security & Compatibility

NetDirector Matrix KVM Switches can control up to 32 computers per switch, or up 8,192 computers by daisy-chaining and cascading additional KVM switches. NetCommander KVM Switches can control up to 16 computers per switch, or up 256 computers by daisy-chaining and cascading additional KVM switches. Password security accommodates multiple users. No software installation is required, guaranteeing that KVM switches will not degrade server performance, compatibility or reliability. The KVM switches and interface modules are compatible with all major operating systems. A variety of USB, PS/2 and Sun® interface modules are available.

Specifications



All models include mounting hardware to fit standard 19-inch racks. "Interface compatibility depends on interface modules used (sold separately). "Cable kits are included. "Requires daisy-chaining and/or cascading additional KVM switches.

Visit www.tripplite.com for a complete list of Cat5/5e cables, interface modules and adapters.



IP Remote Access Unit Model # B050-000

Allows administrators to control KVM Switches via TCP/IP. Can be used for system administration, BIOS-level troubleshooting, installing GUI applications, rebooting and more. Operates through embedded processors only, not servers, so there is no interference with server or network performance. Offers password protection, certificate management, 256-bit SSL encryption and high-resolution video.

Also available: interactive cable selector guide, owner's manuals and more!

SmartRack[™] Enclosures



- ▶ 48U, 42U and 25U models with or without side panels
- ► Adjustable mounting rails with easy-view depth index
- ► Toolless mounting slots for PDUs and vertical cable managers
- ► Airflow exceeds server manufacturer requirements

Offer Convenient Installation

With a design streamlined by years of customer feedback and IT best practices, SmartRack Enclosures make your job easier. Enclosures ship fully assembled* for rapid deployment and roll into place on heavy-duty casters. Toolless mounting slots allow guick installation of PDUs and vertical cable managers. All mounting rails include an easy-view depth index to eliminate time-consuming measurements. Lightweight modular doors and side panels provide safe, convenient service access. Integrated baying tabs facilitate combining enclosures in rows for standard data center baying applications. * Except knockdown models (see below).

Support High-Density Data Centers

Heavy-duty SmartRack Enclosures hold up to 3,000 lb and support advanced cooling, cable management, power distribution and monitoring features that keep critical servers and network equipment operating around the clock. Fully perforated doors permit massive front-to-rear airflow that exceeds server manufacturer requirements. Compatibility with hot-aisle / cold-aisle configurations is assured: cool air is drawn from the cold aisle through the front of the enclosure and warm air is exhausted to the hot aisle from the rear of the enclosure.















OTANDAND MODELO	STA	NDAF	RD M	ODEL	S
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STANDARD MODELS			-						
Model	SR25UB	SR25UBEXP	SR42UB	SR42UBEXP	SR48UB	SR48UBEXP			
Rack Spaces	25U	25U	42U	42U	48U	48U			
Side Panels	Yes (2)	No	Yes (4)	No	Yes (4)	No			
Stationary Load Capacity			3,000 lb (1,363 kg)						
Rolling Load Capacity			2,250 lb (1,022 kg)						
Mounting Depth	Adjustable from 4	to 35.75 in (102 to 908 mr	n) - Optional SREXTENDER a	ccessory increases maxi	mum depth to 43.75 in (1,	num depth to 43.75 in (1,111 mm)			
Mounting Holes		Square (All models inclu	ide 50 cage nuts, screws and	d cup washers for equipm	nent mounting)				
External Height	49 in (1,	245 mm)	78.5 in (1,9	94 mm)	89 in (2,	261 mm)			
External Width			23.63 in (600 mm)						
External Depth		43 in (1,092 mm) - Optiona	I SREXTENDER accessory in	creases external depth to	51 in (1,295 mm)				
Unit Weight	195 lb (88.6 kg)	149 lb (67.7 kg)	281 lb (127.7 kg)	203 lb (92.3 kg)	309 lb (140.5 kg)	211 lb (95.9 kg)			
Knockdown Option*	SR25UBKD	SR25UBEXPKD	SR42UBKD	SR42UBEXPKD	SR48UBKD	SR48UBEXPKD			
SHOCK PALLET MODELS**									
Model	SR25UBSP1	SR25UBEXPSP1	SR42UBSP1	SR42UBEXPSP1	SR48UBSP1	SR48UBEXPSP1			
Pre-Installed Equipment Capacity	1,005 lb (456.8 kg)	1,051 lb (477 kg)	919 lb (417 kg)	997 lb (453 kg)	891 lb (405 kg)	989 lb (449 kg)			

^{*} Knockdown enclosures ship disassembled into several sections for easy transport and assembly in confined spaces. ** Shock pallet models include special heavy-duty shipping pallet and reusable packaging for equipment pre-installation and reshipment to final site. They are otherwise identical to standard models. Shock pallet models with increased equipment capacity are also available (replace "SP1" with "SP2" in model name)

SmartRack Enclosures accommodate all 19-inch rackmount equipment, regardless of vendor.

















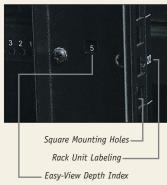


Adjustable Mounting Rails (4) with Easy-View Depth Index

Front and rear sets of rails adjust in ¼-inch (6.4 mm) increments.

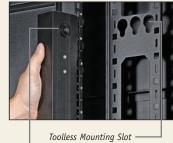
Adjustment is quick and convenient – simply unscrew rails, slide rails to desired depth and restore screws. Easy-view depth index ensures consistent rail placement without requiring time-consuming measurements.

Square mounting holes and included hardware (not shown) support standard 19-inch rackmount installation.



Cable Management Rails (2) with Easy-View Depth Index

Adjustable rails include toolless mounting slots for quick installation of compatible PDUs and other accessories. Easy-view depth index ensures consistent rail placement without requiring time-consuming measurements. Toolless mounting slots are arranged in an industry-standard pattern compatible with a wide variety of accessories.



Toolless Mounting Slot -Toolless Mounting Button on Tripp Lite PDU

Roof Panel (Removable)

Spring-loaded pins allow the roof panel to be removed and replaced in seconds. Includes cable access channels and mounting slots for cable management accessories.



Front Door (Lockable/Removable/Reversible)

Door is perforated for optimal front-to-rear airflow. Door handle is reversible to preserve standard orientation if door is reversed.



Lockable, Reversible Handle

Split Rear Doors (Lockable/Removable)

Split rear doors reduce clearance requirements for service access. Doors are perforated for optimal front-to-rear airflow.

Go to www.tripplite.com for our complete line of 2-post and 4-post open frame racks and rack accessories, including airflow optimization, internal and external cable management, fan-assisted cooling, security accessories, stability accessories, mounting kits, hardware, shelves, patch panels and more.



Modular Side Panels (Lockable/Removable)

Modular side panels are smaller and lighter, improving ease of installation and service. Standard 25U Models Include 2 side panels. Standard 42U and 48U models include 4 side panels. Side panels are not included with "EXP" models, which are intended for in-row baying and other applications that do not require side panels.



Baying Tabs (2)

Baying tabs allow enclosures to be combined securely in rows. Center-to-center width can be set at 600 mm or 24 inches to match standard data center applications.



600 mm 24 in. –

Heavy-Duty Casters and Levelers (4 each)

Casters support a rolling load capacity of 2,250 pounds (1,022 kg), allowing enclosures to be pre-configured and rolled to the final installation location. Levelers support a stationary load capacity of 3,000 pounds (1,363 kg) and adjust to improve enclosure stability. Casters and levelers are removable.



Convenient Grounding System

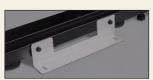
All components are grounded to the enclosure frame, which includes multiple connections for facility ground. Front and rear doors include quick-release ground wires for convenient configuration.



Quick-Release Ground Wire

Stabilizing Brackets (2)

Brackets attach at bottom of enclosure frame (inside or outside) to improve enclosure stability. Brackets can also be bolted to floor with addition of optional SRBOLTDOWN kit.

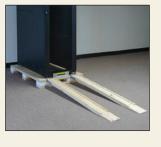


Mounted Outside

Mounted Inside

Shock Pallet ("SP1" and "SP2" Models Only)

Specially reinforced shipping pallet allows the enclosure to be reshipped safely with pre-installed rackmount equipment. Included ramps allow convenient enclosure unloading and reloading.



Power Distribution Units (PDUs)



- ▶ 8 40 Outlets
- Metered Models for Current Monitoring
- Switched Models for Remote Outlet Control
- Automatic Transfer Switching (ATS) Options

Improve Power Distribution Manageability & Reliability

Tripp Lite Power Distribution Units (PDUs) are available in three different configurations (Basic, Metered and Switched) to provide a wide variety of power manageability options for every application. All PDU configurations reliably distribute power from a UPS system or utility wall outlet to multiple pieces of critical networking, server or telecom equipment. Metered models provide a digital current meter that allows managers to visually track PDU load conditions. Switched models include a digital current meter as well as a network interface that allows managers to remotely control individual PDU outlets.

Avoid PDU/Circuit Overload with Digital Current Meter

All Switched and Metered models include a digital current meter that allows managers to track PDU load conditions (in amps), helping them to avoid overloading their PDUs and utility circuits. Managers can also remotely monitor PDU load conditions when they use the network interface and software included with all Switched models and select Metered models. With the network interface, managers can set alarm thresholds to avoid overload as networks grow.

Remotely Control Outlets Through Network Interface

Switched PDUs include a built-in network interface that allows users to remotely control individual outlets (and connected devices) through SNMP, Web or Telnet, reducing costly



service calls by rebooting locked devices. Tripp Lite's Switched PDUs are the only PDUs that combine automatic transfer switching (ATS) and a network interface in one unit. Since other PDUs in their class include the remote interface as a separate option, Tripp Lite's Switched PDUs save users significant installation costs.

Ensure Uptime with Dual AC Inputs & ATS

Select Switched and Metered models* include dual AC inputs and an automatic transfer switch (ATS). The ATS feature ensures the uptime of connected devices by automatically providing a backup source of AC power if one source fails or is taken off-line for maintenance. Two AC input cords—one attached and one detachable/optional—connect to separate, redundant power sources.

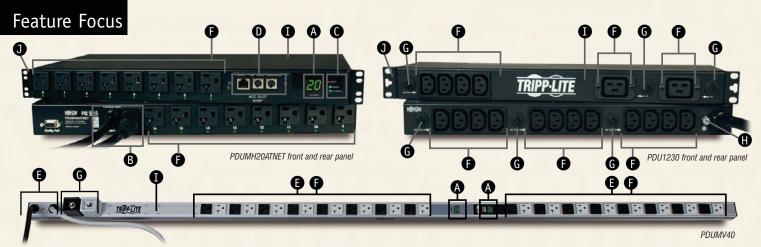




The PDU monitors voltage levels from both power sources, and an internal transfer switch selects the source with the optimal voltage.

* PDUMH15ATNET, PDUMH20ATNET, PDUMH15AT and PDUMH20AT.

PDU Selector Guide (Features, Choose a PDU by identifying the ideal	/Benefits) features and benefits for your application.			
Features	Benefits	Basic PDUs	PDU Types Metered PDUs	Switched PDUs
Multiple Outlets	Increase the number of devices that can be powered by a UPS system or utility source.	Х	Х	X
High-Current Plug and Low-Current Outlets	Increase connection flexibility by converting a single high-amperage outlet into multiple low-amperage outlets.	Select Models	Select Models	Select Models
Long Input Power Cord	Increases installation flexibility by allowing devices to be located far from an input power source.	X	X	X
On-Site Load Monitoring (Digital Current Meter)	Avoid overloads and safely add loads as total equipment power consumption is displayed.		Х	X
Remote Load Monitoring (Network Interface)	Remote notification of user-selectable load thresholds prevents downtime due to overload as network installations grow.			Х
Dual AC Input Plugs with Automatic Transfer Switching	Ensure the uptime of connected devices by powering the PDU from two separate, redundant input sources (two utility inputs, two UPS systems, a utility input and a UPS system, etc.)		Models with ATS	Models with ATS
Remote Control of Individual Outlets (through SNMP Web or Telnet)	Reduces costly service calls by rebooting locked devices. Extends runtime of critical devices by turning off non-critical loads during blackouts.			X



A Digital Current Meter

Specifications

PDUV20

PDUNV

PDU12IEC

PDUV30HV PDU40TDUAL

120V

208V

120V

100-240V

100-240V

20A

2 x 15A

2 x 20A

16A

16A

5-20P

L6-30P

L5-20P / 5-20P (2)^(E) Supports 6 plugs^(F)

C20 inlet (no cord)(G)

Maximizes the number of devices that can be safely added to the PDU (without overloading it) by displaying the total power consumption of connected equipment in amps.

B Dual AC Input Cords with Automatic Transfer Switching (ATS)

Two AC input cords can be connected to two separate, redundant power sources. Internal ATS safeguards the uptime of connected devices by automatically providing a backup source of AC power if one source fails or is taken off-line for maintenance.

C AC Input LEDs (ATS models only) Indicate which input supply is powering the PDU. Remote Control/Monitoring Network Interface

Remotely control individual PDU outlets through SNMP, Web or Telnet. "Status Link" iack connects PDU to Ethernet. "Envirosense" jack connects PDU to optional sensor module (model # ENVIROSENSE) for remote temperature and humidity monitoring. "Config" jack allows manual PDU configuration after initial installation.

E Dual Circuits for Redundant Power Supply Applications PDU40TDUAL and PDUMV40 include two separate circuits (with corresponding power cord, circuit breaker and outlets).

Multiple AC Outlets

G Short Circuit Protection

Grounding Lug

Rugged, All-Metal Cabinet

1 Versatile Mounting Hardware

Plug Retention Bracket (not shown) Select models include a bracket that secures connected equipment cords, reducing the risk of accidental disconnection.

Toolless Mounting Buttons (not shown) Select models include mounting buttons that support toolless mounting in SmartRack Enclosures and Open Frame Racks.

15 ft.

10 ft

2 x 15 ft. 10 ft.

OU vertical (36 in.)

OU vertical (63.75 in.)

1U RM/0U vertical

1U RM/0U vertical

(A) **WR** (D) (A) Outlet Power Cord Input Outlet Front Rear Current Input Model # Voltage Length (ft) Form Factor Capacity Plug Type Quantity Type Outlets Switched PDUs (Individual Outlet Control--Network Interface) 5-15P PDUMV15NET 120V 15A 5-15/20R OU vertical (49.00 in.) L5-20P / 5-20P^(D) PDUMV20NET 120V 20A 24 5-15/20R 24 10 ft OU vertical (63.75 in.) 20 C13, 4 C19 5-15/20R PDUMV20HVNET PDUMV30NET 208/230V 20A 30A 24 24 OU vertical (63.75 in.) OU vertical (70.00 in.) L6-20P 24 24 10 ft. L6-30F 120V 10 ft 20 C13, 4 C19 C13 OU vertical (70.00 in.) PDUMV30HVNET 208V 16-30P 24 24 30A 10 ft PDUMH15HVNET 1U RM/0U vertical 208V/230V 15A 8 8 6.5 ft. C14 PDUMH20HVNET 208V/230V 20A C20 (L6-20P) 8.5 ft. 1U RM/0U vertical PDUMH30NET 5-15/20R 10 ft PDUMH30HVNET 208V 30A L6-30P C13 16 10 ft 2U RM Include Automatic Transfer Switching (ATS) PDUMH15ATNET 120V® 156 5-15P L5-20P / 5-20P^(C) 2 x 12 ft.(H) 5-15R 1U RM/0U vertical 120V^(B) PDUMH20ATNET 5-15/20R 8 20A 16 2 x 12 ft.(H) 1U RM/0U vertical Metered PDUs (Displays Power Consumption 1U RM/0U vertical PDUMH15 15A 20A 5-15P L5-20P / 5-20P^(D) 5-15R 120V PDUMH20 120V 5-15/20R 12 1U RM/0U vertical 15 ft. 5-15P L5-20P / 5-20P^(D) PDUMV15 5-15R OU vertical (48.00 in.) 15A 16 15 ft. PDUMV20 120V 20A 20 5-15/20R 20 15 ft. OU vertical (60.00 in.) 32 38 24 PDUMV40 120V 2 x 20A L5-20P / 5-20P (2)(E) 5-15/20R 32 2 x 10 ft. OU vertical (71.25 in.) 32 C13, 6 C19 5-15/20R PDUMV20HV PDUMV30 208/230V 20A L6-20P 38 10 ft. 10 ft. OU vertical (63.75 in. 24 OU vertical (63.75 in. OU vertical (63.75 in. L5-30F 120V 30A PDUMV30HV 30 24 C13, 6 C19 30 2081 2 x 15A I 6-30F 10 ft Include Automatic Transfer Switching (ATS) PDUMH15AT 120V(B) 5-15P L5-20P / 5-20P^(C) 1U RM/0U vertical PDUMH20AT 120V^(B) 5-15/20R 2 x 12 ft.(H) 1U RM/0U vertical Basic PDUs (Multi-Outlet Power Distribution) PDU1215 120V 5-15P 5-20P 1U RM/0U vertical 13 13 PDU1220 120V 20A 5-15/20R 12 15 ft 1U RM/0U vertical PDU1220T PDU2430 20A 30A 120V L5-20P 13 24 5-15/20R 12 15 ft. 1U RM/0U vertical 120V I 5-30F 15 ft 1IJ RM/0U vertical 5-15R 12 2 C19, 16 C13 200-240V 1U RM/0U vertical L6-30P 4 C13 / 2 C19 12 C13 PDU1230 30A 18 15 ft 120V 15A 15 ft. OU vertical (26.00 in.) PDU1415 5-15P 120V 20A L5-20P OU vertical (26.00 in.) PDU1420T 5-15/20R 14 15 ft. PDUV15 120V 15A 12 15 ft OU vertical (36 in.)

PDU Accessory (for use with Switched Models) **ENVIROSENSE** Environmental sensor module. Allows select PDUs (with "NET" suffix in model number) to monitor external temperature/humidity & contact-closure inputs (a) Certifications vary by model. (a) Primary input tolerances: 100-1377, 45-65Hz, Outside of this range, the PDU switches to the secondary input is passed through to the output without voltage or frequency restrictions. Two front panel LEDs marked "primary" and "secondary" indicate which source is supplying power to the PDU. (b) PDUMH20AT and PDUMH20ATNET include two cords with twist-lock L5-20P input plugs and two adapters to support connection to a straight-blade S-20R outlet. (b) PDUMY20AET include a twist-lock L5-20P plug and an adapter to support connection to a straight-blade NEMA 5-20R outlets. (b) PDUMY20AET include a twist-lock L5-20P plug and two adapters to support connection to a straight-blade NEMA 5-20R outlets. (b) PDUMY20AET include a CDC input plug, plug by the straight lock L5-20P plugs and two adapters to support connection to a straight-blade NEMA 5-20R outlets. (b) PDUMY20AET include a CDC input plug, plug sand two adapters to support connection to straight-blade NEMA 5-20R outlets. (b) PDUMY20AET includes a CDC input plug, plug sand two adapters that terminate in C14, 5-15P, 5-20P, L5-20P or L6-20P plugs. (b) PDUISEC has a CDC power inlet. User must supply input cord with C19 connection to attach to the PDU, and any plug type to connect to a utility source. (b) Includes

5-15/20R

32 C13, 6 C19

5-15/20R 12 C13, 2 C19

12 C13, 2 C19

12

38

40

4 C13

4 C13

8 C13 / 2 C19

8 C13 / 2 C19

38

40

GREEN UPS TECHNOLOGY

Eco-Friendly Backup Power

Saves Money & Protects the Environment



- Superior Efficiency Conserves Electricity
- Special ECO Outlets Turn Off Energy-Wasting "Phantom Loads"
- ► RoHS Compliance Reduces Hazardous Substances
- Recycled and Recyclable Materials Minimize Waste

Reduces Data Center Costs

Two-thirds of the electricity required by a data center is consumed by cooling and power distribution, including UPS systems.* Using high-efficiency SmartOnline (pages 8-23) or SmartPro (pages 2-7, 24-25) UPS Systems and right-sizing load levels to balance fault-tolerance and economy can make your data center significantly cooler, greener and more cost-effective.

SmartOnline UPS Systems are up to 97% efficient in economy mode, a potential efficiency increase of 10% or more versus comparable systems from competing vendors. Tripp Lite offers several tools that help you safely right-size load levels for additional efficiency gains. Metered PDUs display load levels and Switched PDUs also include a network interface for remote load monitoring (pages 38-39). SmartOnline and SmartPro UPS Systems support on-site and remote load monitoring through the optional SNMPWEBCARD or free PowerAlert software (pages 26-27).

By increasing UPS efficiency 10% for a modest 32 kilowatt load, you can reduce carbon emissions by 34 tons per year. Over a five-year period, you can conserve more than 250 megawatt-hours of electricity—enough to power an average single-family home for more than 20 years—and you can save \$27,095 on your electric bill.**

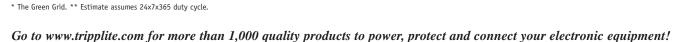
Saves Energy at Home and Office

Tripp Lite's ECO Series UPS Systems (pages 30-31) are up to 99% efficient and turn off designated ECO outlets when your computer is inactive. This feature eliminates wasteful phantom loads that consume electricity even when a device appears to be turned off. ECO Series UPS Systems can save up to \$50 on your utility bill, conserve 470 kilowatt-hours of electricity and reduce your carbon footprint by 630 pounds per year.*

* Estimate assumes 5% efficiency gain and 60W of phantom loads.

Protects the Planet

Tripp Lite was an early supporter of the RoHS (Restriction of Hazardous Substances) directive and leads the industry in RoHS compliance. RoHS aims to improve environmental conditions worldwide by strictly limiting the use of six hazardous substances: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ether (PBDE). Tripp Lite manufactures hundreds of RoHS-compliant products—including UPS systems—which can be identified by the RoHS logo.



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