# SmartOnline<sup>™</sup> Single-Phase Intelligent True On-Line UPS Systems



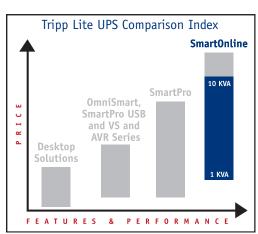
### Deliver True On-Line, Pure Sine Wave, Zero Transfer Time Operation

SmartOnline Rackmount/Tower UPS Systems provide mission-critical equipment with the highest level of power protection. 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 models accept the widest range of incoming voltage and frequency variations, delivering the most consistently pure, highly-regulated AC power: ±2% V and ±0.2 Hz.

SmartOnline Rackmount/Tower 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 lightning and surges and filter disruptive line noise.

# Provide 100% Availability

All models ensure 100% availability with an automatic internal bypass which passes through utility power in the event of an internal fault or overload. In addition SU6000RT3U, SU6000RT3UXR and SU10KRT3U models include a manual bypass switch on the transformer module which ensures 100% availability by allowing



**Additional** Single- and 3-Phase solutions available-1kVA to 80kVA! See pages 10 to 15.

#### TRUE ON-LINE

- ► 1,000 10,000 VA
- ► Zero Transfer Time, Double-Conversion
- ▶ 65-138V or 156-276V Input with Precision Regulated Output
- ► Internal or External Batteries & Extended Runtime Options
- ► Automatic Internal Bypass
- ► Rack/Tower/Stack Adaptable

you to remove or replace the power module while still continuously supporting connected equipment with filtered AC utility power.

# Manage Multiple Servers

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

\* Additional PowerAlert features: pages 18 and 19.

#### Control Individual Outlets

Prioritize the uptime of mission-critical loads during a power failure with Customized Load Management Receptacles featured on select models. Customized Load Management Receptacles can be controlled independently through PowerAlert. Program 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.

#### **Extend Runtime**

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.



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



SU3000RTXL3Ua tower mount with



SU6000RT3U or SU10KRT3U tower moun

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

All models accept external

-			Runtime (r	ninutes) wit	h additional ext	ernal battery	packs											
~	Load	Runtime (minutes) with	Non-Expandable	Ex														
A	(VA/Watts)	included batteries*	Battery Pack	1	2	3	4											
I	SU1000RTXL	2Ua Extended Runtime	BP24V28-2U (Non-Expandable)	BP24V70-3U (Expandable)														
	500/400	18	74	192	427	660	930											
٢	1000/800	6	33	90	192	306	432											
	SU1500RTXL	2Ua Extended Runtime	BP48V24-2U (Non-Expandable)			######################################												
ш	750/600	17 77 5 38		168	336													
	1500/1200			82	166	258	336											
Σ	SIISSUURTYI	BP48V24-2U BP48V60RT-3U SU2200RTXL2Ua Extended Runtime (Non-Expandable) (Expandable)																
н	1100/800	18	66	132	266	378	530											
	2200/1600	6	28	61	122	186	246											
Η.		BP72V12-2U																
z		.3Ua & SU3000RTXL3UHV Ex	(Expandable)															
_	1500/1200	17	N/A	39	62	91	111											
$\neg$	3000/2400	6	N/A	17	28	37	48											
~		000RT3UHV & SU5000RT3U Extended Runtime BP240V10RT-3U (Expandable)																
	2500/1750	26	N/A	68	131	188	247											
	5000/3500	11	N/A	31	60	87	118											
۵	SU6000RT3U	### 100/3500   11   10/A   51   00   07   110																
ш	3000/2400	37	N/A	79	131	174	222											
	6000/4800	15	N/A	37	58	79	104											
D	SU6000RT3U	SU6000RT3UXR Extended Runtime  BP240V10RT-3U (Expandable)																
z	3000/2400	79	N/A	131	174	222	268											
	6000/4800	37	N/A	58	79	104	131											
ш	SU10KRT3UI	HV & SU10KRT3U Extended I	Runtime		BP240V1 (Expand													
_	5000/4000	20	N/A	45	71	98	130											
×	10000/8000	8	N/A	19	32	45	58											
ш		are contained either internally within the UPS s or increased runtime.	system or are offered as an exter	nal module, depend	ding on model. ** Batter	y packs which are "ex	pandable" can be											

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.

#### Display Critical Operational Conditions

SmartOnline Rackmount/Tower UPS Systems feature a front panel LED display or combination LCD/LED display (on 6kVA and 10kVA models) 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.

**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 2)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).

# Adapt 6kVA Hardwired Models to Plug/Receptacle Applications

Tripp Lite offers five alternate back panel units (SUPDM11, SUPDM12, SUPDM13, SUPDM15 and SUPDM16)\* which adapt 6kVA hardwired models to applications that require plugs and receptacles.

\* See specifications chart on page 9 for details.



SUPDM12 Alternate Back Panel Unit

#### Feature Focus

A Extended Runtime Capability

All models feature connectors to accept optional external battery packs for additional runtime. External batteries can be "hot-swapped". See Extended Runtime Chart on page 7 to locate the perfect SmartOnline Rackmount/Tower model that fits your runtime needs.

B Customized Load Management Select models feature special receptacles that you control independently through PowerAlert Software.

C 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 costly accessories.



Accessory slot accepts an optional internal SNMP/Web card\* for remote shutdowns, reboots and more. Use card with optional environmental sensor\*\* to remotely monitor environmental conditions or to control alarm/security systems.

\* Model: SNMPWEBCARD. \*\* Model: ENVIROSENSE.



Circuit breakers help guard against input/output short circuits.







Power Module Rear Panel (standard with all 6 & 10kVA models. SU6000RT3U shown). Includes the UPS system's control panel, communication ports and inverter/charger components.



External Battery Module Rear Panel (standard with all 6 & 10kVA models. SU6000RT3UXR model includes two external battery modules. BP240V10RT-3U shown).

Isolation Multi-Voltage Power Distribution Transformer Module (standard with SU6000RT3U, SU6000RT3UXR & SU10KRT3U models only. SU6000XFMRRT3U shown).

Accepts regulated input from the power module and provides 200/208/220/230/240V and

Supplies battery backup to connected equipment during a blackout.

Accepts regulated input fit
100/120V output.

Bypass Operation: A manual bypass switch on the transformer module (included with select UPS models only) allows you to circumvent the power module while still continuously supporting connected equipment when performing maintenance.

F Emergency Power Off

A modular jack included with 6KVA and 10KVA 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.

G Hardwire, Single-Phase Input/Output
To add a plug and receptacles to 6kVA models, see SUPDM options listed below. To provide 100/120V output for 5kVA, 6kVA and 10kVA models, see isolation transformer options listed below.

H 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.

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.

#### **Specifications**

Model MOM	Output Capacity (VA/ Watts)	Backup Time (Typical Minutes) Half/Full Load <sup>(B)</sup>	External	Rack Space	Input Voltage Range/ Fre- quency (Hz)	Nominal Output Voltage	Re Quan- tity	AC ceptacles NEMA Type	Customiz- ed Load Manage- ment Recep- tacles		RS-232	Ports   Contact   Closure   (DB9)	Phone/ DSL/ Ethernet <sup>(E)</sup> Surge Pro- tection	SNMP/ Web Acces- sory Slot <sup>(F)</sup>	Input Plug (NEMA)	Power Cord Length (ft)	Unit Dimensions H x W x D (in) <sup>(6)</sup>	Ship ping Weig (lb)
UPS Systems	1000/ 800	18/6+	AB	2U	65-138 (50/60) <sup>(c)</sup>	120	6	5-15R	2	1	1 <sup>(D)</sup>	_	1 line	yes	5-15P	10	3.5 x 17.5 x 13.5	41
SU1500RTXL2Ua	1500/ 1200	17/5+	CD	2U	65-138 (50/60)(c)	120	6	5-15R	2	1	1 <sup>(D)</sup>	_	1 line	yes	5-15P	10	3.5 x 17.5 x 19	54
SU2200RTXL2Ua	2200/ 1600	18/6+	CD	2U	65-138 (50/60) <sup>(c)</sup>	120	7	6 (5-15/20R) 1 (L5-20R)	. 2	1	1 <sup>(D)</sup>	_	1 line	yes	5-20P(H)	10	3.5 x 17.5 x 19	58
SU3000RTXL3Ua	3000/ 2400	17/6+	EF	3U	65-138 (50/ 60) <sup>(c)</sup>	120	9	4 (5-15R), 4 (5-15/20R)	, 2	1	1 <sup>(D)</sup>	_	1 line	yes	L5-30P	10	5.25 x 17.5 x 18	74
⇒ SU3000RTXL3UHV	3000/ 2400	17/6+	EF	3U	130-275 (50/60) <sup>(c)</sup>		8	1 (L5-30R) 6 (6-20R), 2 (L6-20R)	2	_	1(D)	_	_	yes	L6-20P	10	5.25 x 17.5 x 20	91
<u>⇒</u> SU5000RT3U	5000/ 3500	26/11+	GH	3U (power module) & 2U (battery module) 2U (transfor-		230/240 200/ 208/220/ 230/240 & 100/ 120	16	2 (L6-20R) 2 (L6-30R) 12 (5-15/20R)	_		1	1	_	yes	L6-30P	10	5.25 x 17.5 x 26 (power module) 3.5 x 17.5 x 22.5 (battery module) 3.5 x 17.5 x 21	58 138 60
SU5000RT3UHV <sup>(A)</sup>	5000/ 3500	26/11+	GH	mer module) 3U (power module) & 2U (battery module)	156- 276 (50/ 60) <sup>(c)</sup>	200/ 208/220/ 230/240	4	2 (L6-20R) 2 (L6-30R)	_	_	1	1	_	yes	L6-30P	10	(transformer module) 5.25 x 17.5 x 26 (power module) 3.5 x 17.5 x 22.5 (battery module)	58 138
SU6000RT3UHV <sup>(A)</sup>	6000/ 4800	37/15+	GH	3U (power module) & 3U (battery module)	156- 276 (50/ 60) <sup>(c)</sup>	200/ 208/220/ 230/240	see	nardwire SUPDM11 option below)	_	_	1	1	_	yes	hard (see SU opti- belo	IPDM11 ons	5.25 x 17.5 x 26 (power module) 5.25 x 17.5 x 22.5 (battery module)	58 127
<u>⇒</u> SU6000RT3U	6000/ 4800	37/15+	GH	3U (power module) 3U (battery module) & 3U (transfor- mer module)	156- 276 (50/ 60) <sup>(c)</sup>	200/208/ 220/230/ 240 & 100/120	hardwire		_		1	1	_	yes	hardwire (see SUPDM 12-16 options below)		5.25 x 17.5 x 26 (power module) 5.25 x 17.5 x 22.5 (battery module) 5.25 x 17.5 x 26 (transformer module)	127 127
⇒ SU6000RT3UXR	6000/ 4800	79/37+	GH	3U (power module) 6U (2 battery modules) & 3U (transfor- mer module)	. ′	200/208/ 220/230/ 240 & 100/120	hardwire (see SUPDM12-16 options below)		_	_	1	1	_	yes	hardwire (see SUPDM 12-16 options below)		5.25 x 17.5 x 26 (power module) 10.5 x 17.5 x 22.5 (2 battery modules) 5.25 x 17.5 x 26 (transformer module)	25 <sup>4</sup> 12 <sup>4</sup>
⇒ SU10KRT3UHV <sup>(A)</sup>	10000/ 8000	20/8+	GH	3U (power module) & 3U (battery module)	156- 276 (50/ 60) <sup>(c)</sup>	200/208/ 220/ 230/240	ľ	nardwire	_	_	1	1	_	yes	hard	wire	5.25 x 17.5 x 26 (power module) 5.25 x 17.5 x 22.5 (battery module)	68 127
⇒ SU10KRT3U	10000/ 8000	20/8+		3U (power module) 3U (battery module) & 3U (transfor- mer module)	156- 276 (50/ 60) <sup>(c)</sup>	200/208/ 220/230/ 240 & 100/120	ľ	nardwire	_	_	1	1	_	yes	hard	wire	5.25 x 17.5 x 26 (power module) 5.25 x 17.5 x 22.5 (battery module) 5.25 x 17.5 x 26 (transformer module)	68 127 124
External Battery Pa BP24V28-2U				nd cable, 2U.	Not expar	ndable. RE	D/BLA	CK 2-point co	nnector.								3.5 x 17.5 x 14	68
BP24V70-3U								2-point connec									5.25 x 17.5 x 22.5	
BP48V24-2U BP48V60RT-3U								oint connecto	r.								3.5 x 17.5 x 13.5 5.25 x 17.5 x 22.5	70
BP72V12-2U								3.5 x 17.5 x 12.25										
BP72V21RT-3U									5.25 x 22.5 x 17.5									
									5.25 x 17.5 x 22.5									
BP240V32								LACK 3-point (	connector	Will 1	fit in stan	dard 19	inch rack	enclosu	ires.		20 x 17.5 x 35.5	611
SU5000XFMRRT2U																only).	3.5 x 17.5 x 21	60
SU6000XFMRRT3U								,, .								3).	5.25 x 17.5 x 26	117
SU10KXFMRRT3U																	5.25 x 17.5 x 26	135
SUPDM11								<b>8V</b> (for SU600						<b>.</b>				7
SUPDM12												<b>8V</b> (L6-3	OR) (for S	SU6000F	RT3U & S	U6000F	RT3UXR models only).	7
SUPDM13																	RT3UXR models only).	
SUPDM15								-15/20R), thre										7
								-15/20R), thre										7
SUPDM16								tible UPS syst				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,0011100	, u i i i i i u	olo offis)		
SUPDM16 SNMPWFRCARD	Internal 9								UTTO IU LU									
SNMPWEBCARD												))						
SNMPWEBCARD ENVIROSENSE	Allows U	PS to mor	nitor exter	nal temperat	ure/humid	ity & cont		sure inputs (re				).						
SNMPWEBCARD	Allows U Tower kit	PS to mor	nitor exter Ijustable I	nal temperat base stands–	ure/humid –2U to 9U	ity & cont	act-clo		quires SNI	MPW	/EBCARD	).						

<sup>+</sup> Backup times are expandable using external battery packs. (M Optional isolation transformers are available to provide 100/120V output. See listing for SU5000XFMRRT3U, SU6000XFMRRT3U or SU10XFMRRT3U, depending on your UPS system model. (M Backup times will vary depending on battery condition and load. (M Auto-selecting frequency, (M) Includes a single combination RS-232 and contact-closure port. (M) Not compatible with PG (power over Ether) applications. (P) For use with optional internal SNMP/Web management accessory card (model: SNMP/WEBCARD) sold separately. (M) All models are designed with mounting hardware to fit standard 19 in. racks. Model widths are for the UPS case only, without mounting hardware. (M) 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. The policy of Tripp Lite is one of continuous improvement. Specifications are subject to change without notice. Actual product may differ slightly from photos.

Extended Warranties and On-Site Service/Warranty Programs are available separately at www.tripplite.com