

### Tripp Lite 1111 W. 35th Street

Chicago, IL 60609 USA Telephone: 773.869.1234 www.tripplite.com

## SmartOnline 1kVA On-Line Double-Conversion UPS, 2U Rack/Tower, 200/220/230/240V C13 outlets

#### MODEL NUMBER: SUINT1000RTXL2UA





#### Description

1000VA online, double-conversion UPS system for critical server, network and telecommunications equipment. 2U rackmount form factor with an installed depth of only 13.5 in (34.3 cm). Expandable battery runtime with optional external battery packs: BP24V15RT2U, BP24V28-2U (maximum of 1 per UPS) or BP24V70-3U (multiple battery packs can be daisy-chained). Full-time sine wave 200, 208, 220, 230 or 240V +/-2% output. Uninterruptible Power Supply (UPS) continuously converts raw incoming AC power to DC, then re-converts output back to completely regulated, filtered AC output. Corrects brownouts as low as 130V and overvoltages as high as 275V without draining battery power. IEC-320-C14 inlet input connection; IEC-320-C13 output receptacles. Network-grade AC surge and noise suppression. Zero transfer time between AC and battery operation. Highly efficient operation in optional Economy Mode setting, saving BTU heat output and energy

#### **Highlights**

- 1000VA / 1kVA / 800 watt on-line double-conversion 2U rack/tower UPS
- 200/208/220/230/240V 50/60Hz output; High efficiency economy mode option
- Expandable runtime; Hot-swap batteries; 13.5 in / 34.3cm installed depth
- USB, RS232 & EPO ports; support for SNMP/WEB card options
- Front panel status LEDs with detailed load and battery metering
- C14 inlet, C13 outlets, 2 C13 to C14 power cables included

#### Package Includes

- SUINT1000RTXL2Ua
   Rack/Tower UPS System
- · PowerAlert Software and Cabling
- 4-Post Rackmount Installation Hardware
- Warranty Information and Owner's Manual
- 2 IEC C13 to C14 interconnection cables

costs. Network management interfaces support simultaneous communications via USB port, DB9 serial port and SNMPWEBCARD slot. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Supports simultaneous detailed monitoring of equipment load levels, self-test data and utility power conditions via all 3 communications interfaces. Includes PowerAlert monitoring software and complete cabling. Emergency Power Off (EPO) interface. 3-stage metered current monitoring and battery charge status LEDs. LED display panel easily rotates for more convenient viewing in rackmount or tower configurations. Data-line surge suppression for dialup, DSL or Ethernet network connection. Utility power and voltage regulation LEDs. Audible alarm. Self-test. Fault-tolerant auto bypass mode. 4-post rackmount accessories included; optional 2-9USTAND tower stand kit and 2POSTRMKITWM 2-post rack & wall-mount accessories available. Field-replaceable, hot-swappable internal batteries and external battery packs. Attractive all-black color scheme.

#### **Features**

- True online, double-conversion power conditioning offers network-grade pure sine wave AC power for critical fileservers, internetworking equipment and other sensitive electronics
- Maintains output within 2% of selectable 200/208/220/230/240V at 50/60Hz (+/-0.05Hz)
- Neutralizes hard-to-solve problems like frequency variations, fast electrical impulses, harmonics and other power problems not addressed by other UPS types
- · Zero transfer time, on-line, double-conversion and economy-mode operation supported

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- Versatile rack/tower format requires only 2 rack spaces (2U) in rackmount applications
- Maintains AC output at near perfect levels even during extended-duration brownouts as low as 130V and overvoltages to 275V without using battery
  power. (For loads under 70%, brownout support extends to 130V; for loads over 70%, brownout support extends to 160V)
- During power failures, internal batteries support connected equipment for 12 minutes at half load (500VA / 400W) and 4 minutes at full load (1000VA / 800W)
- Battery backup runtime is expandable with the addition of external 2U or 3U rack/tower battery packs (Part Number BP24V15RT2U (limit 1), BP24V28-2U (limit 1), BP24V70-3U (multi-pack compatible) and BP24V36-2US (multi-pack compatible)
- Some external battery configurations require the use of Tripp Lite's External Battery Configuration Software (see manual)
- Built-in USB port, DB9 serial port and SNMPWEBCARD slot are simultaneously addressable and support comprehensive network management features;
   USB and DB9 serial cables included
- . Included PowerAlert software offers unattended shutdown, remote monitoring and control of UPS system and connected equipment
- Optional SNMPWEBCARD enables remote monitoring and UPS control via SNMP, Web browser or telnet (Part Number: SNMPWEBCARD)
- HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X
- Includes 6 UPS supported IEC-320-C13 output receptacles and two C13 to C14 interconnection cables (additional interconnection cables available Part Number P004-006)
- IEC320-C14 input connection accepts a variety of detachable cordsets to match country or site-specific wall receptacles
- Fault tolerant electronic bypass maintains utility output during a variety of UPS fault conditions
- Compatible with Tripp Lite's WatchDog software
- Front panel LEDs and audible alarm offer notification of power conditions and full UPS status information
- Optional tower stands allow vertical tower configuration (Part Number 2-9USTAND)
- Optional 2POSTRMKITWM enables 2 post rack / wallmount installation
- Built-in Emergency Power Off (EPO) interface with cable
- Optional PDUBHV10 bypass PDU enables hot-swappable UPS replacement with no disruption to connected equipment

#### **Specifications**

ОИТРИТ		
Output Volt Amp Capacity (VA)	1000	
Output kVA Capacity (kVA)	1	
Output Watt Capacity (Watts)	800	
Power Factor	0.8	
Crest Factor	3:1	
Nominal Output Voltage(s) Supported	200V; 220V; 230V; 240V	
Nominal Voltage Details	230V default	
Frequency Compatibility	50 / 60 Hz	
Frequency Compatibility Details	Output frequency matches input nominal on startup, defaults to 50 Hz on cold-start	
Output Voltage Regulation (Line Mode)	+/- 2%	
Output Voltage Regulation (Economy Line Mode)	+/- 10%	



LEDS ALARMS & SWITCHES		
Severe Undervoltage Correction	2% output voltage regulation during undervoltages to 130 (under 70% load only)	
Undervoltage Correction	2% output voltage regulation during undervoltages to 156	
Overvoltage Correction	2% output voltage regulation during overvoltages to 275	
Voltage Regulation Description	Online, double-conversion power conditioning	
VOLTAGE REGULATION		
Battery Replacement Description	Hot-swappable, user replaceable batteries	
Battery Access	Front panel battery access door	
Internal UPS Replacement Battery Cartridge	RBC92-2U	
Battery Recharge Rate (Included Batteries)	Less than 6 hours from 10% to 80% (typical, full load discharge)	
DC System Voltage (VDC)	24	
External Battery Pack Compatibility	BP24V15RT2U (limit 1); BP24V28-2U (limit 1); BP24V70-3U (multi-pack compatible); BP24V36-2US (multi-pack compatible)	
Expandable Battery Runtime	Extended runtime supported via optional external battery packs	
Half Load Runtime (min.)	12 min. (400w)	
Full Load Runtime (min.)	4 min. (800w)	
BATTERY		
Input Phase	Single-Phase	
Input Circuit Breakers	8A	
UPS Input Connection Description	IEC320-C14 input connection accepts a variety of detachable cordsets to match country or site-specific wall receptacles	
UPS Input Connection Type	C14 inlet	
Nominal Input Voltage(s) Supported	200V AC; 220V AC; 230V AC; 240V AC	
Rated input current (Maximum Load)	5.1A (200V), 4.9A (208V), 4.6A (220V), 4.4A (230V), 4.2A (240V)	
INPUT		
Output AC Waveform (Battery Mode)	Pure Sine wave	
Output AC Waveform (AC Mode)	Sine wave	
Hot-Swap PDU options	PDUBHV10 (2U / 8 C13 outlets)	
Included Output Power Cables	Includes 2 C13 to C14 power cables	
UPS Output Receptacles	6 C13 outlet(s)	
Output Voltage Regulation (Battery Mode)	+/- 2%	





LED Indicators	14 LEDs indicate line power, online mode, economy/bypass mode, on-battery, overload, battery low, replace battery and fault status information; 4-LED meter displays load and battery charge levels; LED panel rotates for viewing in rack/tower formats	
Audible Alarm	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions	
Alarm Cancel Operation	Power-fail alarm can be silenced using alarm-cancel switch	
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation	
SURGE / NOISE SUPPRESSION		
UPS AC Suppression Joule Rating	1225	
UPS AC Suppression Response Time	Instantaneous	
UPS Dataline Suppression	1 line TEL/DSL (1 in / 1 out); 10/100Base T Ethernet	
EMI / RFI AC Noise Suppression	Yes	
PHYSICAL		
Included Mounting Accessory Description	4 post rackmount installation accessories included	
Installation Form Factors Supported with Optional Accessories	2 post rackmount (2POSTRMKITWM); Wallmount (2POSTRMKITWM); Tower (2-9USTAND)	
Primary Form Factor	Rackmount	
UPS Power Module Dimensions (hwd, in.)	3.5 x 17.5 x 13.5	
UPS Power Module Dimensions (hwd, cm)	8.9 x 44.4 x 34.3	
Rack Height	2U	
UPS Power Module Weight (lbs.)	28	
UPS Power Module Weight (kg)	12.7	
UPS Shipping Dimensions (hwd / in.)	8.8 x 23.8 x 20.2	
UPS Shipping Dimensions (hwd / cm)	22.2 x 60.3 x 51.4	
Shipping Weight (lbs.)	40.3	
Shipping Weight (kg)	18.3	
Cooling Method	Fan	
UPS Housing Material	Steel	
ENVIRONMENTAL		
Operating Temperature Range	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius	
Storage Temperature Range	+5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius	
Relative Humidity	0 to 95%, non-condensing	
AC Mode BTU / Hr. (Full Load)	406.4	
	4/5	





Battery Mode BTU / Hr. (Full Load) 442.8  AC Mode Efficiency Rating (100% 67% 94% 94% 94% 94% 94% 94% 94% 94% 94% 94			
AC Mode Efficiency Rating (100% Load)  AC Economy Mode Efficiency Rating (100% Load)  94%  COMMUNICATIONS  Communications Interface  Network Monitoring Port Description  Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications  PowerAlert Software  Included  Communications Cable  WatchDog Compatibility  Supports Watchdog application, OS and hard-reboot restart options for remote applications  LINE / BATTERY TRANSFER  Transfer Time  No transfer time (0 ms.) in online, double-conversion mode  Low Voltage Transfer to Battery  Power (Setpoint)  High Voltage Transfer to Battery  Power (Setpoint)  275  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features  Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  WARRANTY	AC Economy Mode BTU / Hr. (Full Load)	173.6	
AC Economy Mode Efficiency Rating OCOMMUNICATIONS  COMMUNICATIONS  COMMUNICATI	Battery Mode BTU / Hr. (Full Load)	442.8	
COMMUNICATIONS  Communications Interface  USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web Interface  Network Monitoring Port Description  Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications  PowerAlert Software  Included  USB and DB9 cabling included  WatchDog Compatibility  Supports Watchdog application, OS and hard-reboot restart options for remote applications  LINE / BATTERY TRANSFER  Transfer Time  No transfer time (0 ms.) in online, double-conversion mode  Low Voltage Transfer to Battery Power (Setpoint)  160V (100% load), 130V (<70% load)  175  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure)  Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  WARRANTY	AC Mode Efficiency Rating (100% Load)	87%	
Communications Interface  USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMPAWeb interface  Network Monitoring Port Description  Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications  PowerAlert Software  Included  Communications Cable  USB and DB9 cabling included  WatchDog Compatibility  Supports Watchdog application, OS and hard-reboot restart options for remote applications  LINE / BATTERY TRANSFER  Transfer Time  No transfer time (0 ms.) in online, double-conversion mode  Low Voltage Transfer to Battery Power (Setpoint)  160V (100% load), 130V (<70% load)  275  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure)  Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  UPS Certification Details  Kuwait  WARRANTY	AC Economy Mode Efficiency Rating (100% Load)	94%	
Network Monitoring Port Description  Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications  Included  Communications Cable  USB and DB9 cabling included  Supports Watchdog application, OS and hard-reboot restart options for remote applications  LINE / BATTERY TRANSFER  Transfer Time  No transfer time (0 ms.) in online, double-conversion mode  Low Voltage Transfer to Battery Power (Setpoint)  High Voltage Transfer to Battery Power (Setpoint)  275  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  WARRANTY	COMMUNICATIONS		
communications PowerAlert Software Included  USB and DB9 cabling included  WatchDog Compatibility Supports Watchdog application, OS and hard-reboot restart options for remote applications  LINE / BATTERY TRANSFER  Transfer Time No transfer time (0 ms.) in online, double-conversion mode  Low Voltage Transfer to Battery Power (Setpoint) High Voltage Transfer to Battery Power (Setpoint)  275  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure) High Availability UPS Features Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  WARRANTY	Communications Interface	USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface	
Communications Cable  WatchDog Compatibility  Supports Watchdog application, OS and hard-reboot restart options for remote applications  LINE / BATTERY TRANSFER  Transfer Time  No transfer time (0 ms.) in online, double-conversion mode  Low Voltage Transfer to Battery Power (Setpoint)  160V (100% load), 130V (<70% load)  275  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure)  Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  UPS Certification Details  Kuwait	Network Monitoring Port Description		
WatchDog Compatibility  Supports Watchdog application, OS and hard-reboot restart options for remote applications  LINE / BATTERY TRANSFER  Transfer Time  No transfer time (0 ms.) in online, double-conversion mode  Low Voltage Transfer to Battery Power (Setpoint)  160V (100% load), 130V (<70% load)  Pigh Voltage Transfer to Battery Power (Setpoint)  275  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure)  Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  WARRANTY	PowerAlert Software	Included	
LINE / BATTERY TRANSFER  Transfer Time No transfer time (0 ms.) in online, double-conversion mode  Low Voltage Transfer to Battery 160V (100% load), 130V (<70% load)  High Voltage Transfer to Battery Power (Setpoint)  275  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications CE; Tested to SASO (Saudi Arabia)  WARRANTY	Communications Cable	USB and DB9 cabling included	
Transfer Time No transfer time (0 ms.) in online, double-conversion mode  Low Voltage Transfer to Battery Power (Setpoint) 160V (100% load), 130V ( <70% load)  275  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure) Cold-start operation supported  High Availability UPS Features Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certification Details Kuwait  WARRANTY	WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications	
Low Voltage Transfer to Battery Power (Setpoint)  High Voltage Transfer to Battery Power (Setpoint)  275  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features  Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  UPS Certification Details  Kuwait	LINE / BATTERY TRANSFER		
Power (Setpoint)  High Voltage Transfer to Battery Power (Setpoint)  275  SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features  Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  UPS Certification Details  Kuwait	Transfer Time	No transfer time (0 ms.) in online, double-conversion mode	
SPECIAL FEATURES  Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features  Automatic inverter bypass; Hot swappable batteries  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  UPS Certification Details  Kuwait	Low Voltage Transfer to Battery Power (Setpoint)	160V (100% load), 130V ( <70% load)	
Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  UPS Certification Details  Kuwait	High Voltage Transfer to Battery Power (Setpoint)	275	
During a Power Failure)  High Availability UPS Features  Green Energy-Saving Features  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  UPS Certification Details  Kuwait	SPECIAL FEATURES		
Green Energy-Saving Features High efficiency economy mode operation; Schedulable daily hours of economy mode operation  CERTIFICATIONS  UPS Certifications CE; Tested to SASO (Saudi Arabia)  UPS Certification Details Kuwait  WARRANTY	Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported	
CERTIFICATIONS  UPS Certifications  CE; Tested to SASO (Saudi Arabia)  UPS Certification Details  Kuwait  WARRANTY	High Availability UPS Features	Automatic inverter bypass; Hot swappable batteries	
UPS Certifications	Green Energy-Saving Features	High efficiency economy mode operation; Schedulable daily hours of economy mode operation	
UPS Certification Details Kuwait  WARRANTY	CERTIFICATIONS		
WARRANTY	UPS Certifications	CE; Tested to SASO (Saudi Arabia)	
	UPS Certification Details	Kuwait	
Product Warranty Period (Worldwide) 2-year limited warranty	WARRANTY		
	Product Warranty Period (Worldwide)	2-year limited warranty	

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