

## SmartPro 120V 2.2kVA 1.92kW Line-Interactive Sine Wave UPS, 2U, Extended Run, Network Card Options, LCD, USB, DB9

### MODEL NUMBER: SMART2600RM2U







#### Description

Tripp Lite SmartPro Line Interactive UPS with enhanced LCD interface offers network-grade power protection for critical server, network and telecommunications equipment. Line Interactive Uninterruptible Power Supply (UPS) with built-in Auto-Voltage Regulation (AVR) actively corrects brownouts and overvoltages back to usable levels while maintaining a full battery charge in case of power failure. Tripp Lite's unique configuration excels in exceptionally poor-power environments with two separate levels of voltage boost to correct both slight undervoltages and severe brownout conditions. Interactive LCD interface reports UPS operating mode, detailed UPS and site-power data, plus enables a variety of UPS setup and configuration options. Super-fast switchover from line to battery power occurs within milliseconds to maintain operation of connected equipment without interruption or reboot. 96% line-mode efficiency offers reduced heat emissions and operating costs. Network management interfaces support communications via USB, RS-232 and installed Network Management Card option. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Network communications ports enable detailed monitoring of equipment load levels, self-test data and utility power conditions. PowerAlert UPS monitoring software is available via free download. Switched output load banks enable scheduled and real-time remote reboot and load shedding of select outlets. Emergency Power Off (EPO) interface. LCD display panel easily rotates for viewing in rackmount or tower configurations. Audible alarm with push-button momentary alarm-cancel and silent-mode configuration options. Programmable self-test. Field-replaceable, hot-swappable battery modules.

#### Features

- Tripp Lite SMART2600RM2U line interactive 2U rack/tower UPS with 2200VA / 2.2kVA / 1920W capacity and extended runtime options
- · Line interactive UPS with Automatic Voltage Regulation (AVR) corrects brownouts and overvoltages

#### Highlights

- 2.2kVA / 2200VA / 1920W line interactive 2U rack/tower UPS, Sine Wave output
- 120V output, Corrects brownouts and overvoltages from 83V to 145V
- Interactive LCD interface, 4 post compatible mounting accessories
- 96% line-mode efficiency, 2 switched load banks
- USB, RS232, EPO and slot for Network Management Card options
- 120V NEMA 5-20P input, 4
  NEMA 5-15R, 4 NEMA 5-15/20R & 1 L5-20R outlets

#### **Package Includes**

- SMART2600RM2U UPS system
- USB, Serial & EPO cabling
- 4 post installation kit
- Owner's manual



from 83 to 145V

- NEMA 5-20P input plug; 4 NEMA 5-15/20R, 4 5-15R and 1 L5-20R output receptacles, Two independently switched output load banks
- Maintains uninterrupted operation of connected networking equipment during blackouts, surges, brownouts and overvoltages
- High 96% efficiency rating in line-power mode offers reduced power consumption and BTU emisssions
- Internal batteries offer 12.9 minutes at 50% load (960W) and 4.6 minutes at 100% load (1920W)
- Extended runtime is available with optional <u>BP48V24-2U</u> (limit 1), <u>BP48V60RT-3U</u> (multi-pack compatible) and <u>BP48V27-2US</u> (multi-pack compatible)
- External battery configurations require the use of Tripp Lite's External Battery Configuration Software (see manual)
- Hot-swappable, user-replaceable internal batteries and external battery packs can be replaced with no disruption to connected equipment
- Intelligent battery management system extends battery life
- Front panel LCD monitoring screen with MODE and ENTER buttons reports operating mode with 5-bar battery charge graphic, plus 7 selectable screens of detailed UPS and site power information
- LCD interface also supports a number of advanced user setup and operating preferences
- Ships with 4 post rackmount installation hardware; Optional <u>2POSTRMKITWM</u> enables 2 post rackmount/wallmount installation; Optional <u>2-9USTAND</u> enables tower placement
- Built-in USB, RS-232 and slot for Network Management Card option
- Compatible with Tripp Lite UPS management card options <u>TLNETCARD</u>, WEBCARDLX, <u>SNMPWEBCARD</u> and <u>RELAYIOCARD</u>
- HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X
- USB & Serial ports enable data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from <u>www.tripplite.com/poweralert</u>
- Built-in Emergency Power Off (EPO) interface with cable

# **Specifications**

OUTPUT		
Output Volt Amp Capacity (VA)	2200	
Output kVA Capacity (kVA)	2.2	
Output Watt Capacity (Watts)	1920	
Output kW Capacity (kW)	1.92	
Power Factor	0.87	



Nominal Output Voltage(s) Supported	110V; 115V; 120V
Nominal Voltage Details	120v nominal output in battery mode
Frequency Compatibility	60 Hz
Output Voltage Regulation (Line Mode)	-14%, +6%
Output Voltage Regulation (Battery Mode)	+/- 5%
Output Receptacles	(4) 5-15R; (4) 5-15/20R; (1) L5-20R
Load Management Receptacles	Two switchable single-outlet 5-15R load banks
Output Circuit Breakers	15A breaker protects 5-15R, 20A breaker protects 5-15/20R, L5-20R is unbreakered
Output AC Waveform (AC Mode)	Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
INPUT	
Rated input current (Maximum Load)	16A
Nominal Input Voltage(s) Supported	120V AC
UPS Input Connection Type	5-20P
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.0
Recommended Electrical Service	20A 120V
Input Phase	Single-Phase
BATTERY	
Full Load Runtime (min.)	4.6 min. (1920w)
Half Load Runtime (min.)	12.9 min. (960w)
Expandable Battery Runtime	Extended runtime supported via optional external battery packs
External Battery Pack Compatibility	BP48V24-2U (limit 1); BP48V60RT-3U (multi-pack compatible); BP48V27-2US (multi-pack compatible)
DC System Voltage (VDC)	48
Battery Recharge Rate (Included Batteries)	Less than 4.5 hours from 10% to 90% (typical, full load discharge)
Internal UPS Replacement Battery Cartridge	<u>RBC94-2U</u>
Battery Access	Front panel battery access door
Battery Replacement Description	Hot-swappable, user replaceable batteries
Expandable Runtime	Yes



VOLTAGE REGULATION		
Voltage Regulation Description	Automatic voltage regulation (AVR) maintains line power operation with an input voltage range of 83 to 145	
Overvoltage Correction	Input voltages between 127 and 147 are reduced by 12%	
Undervoltage Correction	Input voltages between 95 and 104 are boosted by 12%	
Severe Undervoltage Correction	Input voltages between 83 and 94 are boosted by 24%	
USER INTERFACE, ALERTS & CONTROLS		
Front Panel LCD Display	Front panel LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, operating mode, alarm function and a variety of additional options (see manual for detailed LCD configuration and monitoring options)	
Switches	3 pushbutton switches control OFF / ON power status, MODE selection and MUTE / ENTER control functions	
Alarm Cancel Operation	Power-fail alarm can be temporarily silenced using alarm-cancel switch; silent mode alarm configuration option available	
Audible Alarm	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions	
SURGE / NOISE SUPPRESSION		
UPS AC Suppression Joule Rating	570	
UPS AC Suppression Response Time	Instantaneous	
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.)	3.46 x 17.32 x 19.46	
UPS Power Module Dimensions (hwd, cm)	8.79 x 43.99 x 49.43	
Rack Height (U Spaces)	2	
Minimum Required Rack Depth (inches)	26.5	
Minimum Required Rack Depth (cm)	67.31	
UPS Power Module Weight (lbs.)	64	
UPS Power Module Weight (kg)	29.03	
UPS Shipping Dimensions (hwd / in.)	7.8 x 21.7 x 24.2	



UPS Shipping Dimensions (hwd / cm)	19.81 x 55.12 x 61.47
Shipping Weight (lbs.)	72
Shipping Weight (kg)	32.7
Cooling Method	Fan
UPS Housing Material	Steel
Minimum Required Rack Depth (mm)	673
Primary UPS Height (mm)	88
Primary UPS Width (mm)	440
Primary UPS Depth (mm)	494
Shipping Height (mm)	198
Shipping Width (mm)	551
Shipping Depth (mm)	615
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)	250
Battery Mode BTU / Hr. (Full Load)	980
AC Mode Efficiency Rating (100% Load)	96%
COMMUNICATIONS	
Communications Interface	USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface
Network Management Cards	SNMPWEBCARD; TLNETCARD; WEBCARDLX; RELAYIOCARD
Network Monitoring Port Description	Supports detailed monitoring of UPS and site power conditions
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert Local software at http://www.tripplite.com/poweralert
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	5 milliseconds (line to battery mode); 1 millisecond (battery to line mode)
Low Voltage Transfer to Battery Power (Setpoint)	83



High Voltage Transfer to Battery Power (Setpoint)	145	
SPECIAL FEATURES		
Grounding Lug	Back panel grounding lug	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported	
High Availability UPS Features	Hot swappable batteries	
Green Energy-Saving Features	Greater than 95% efficiency - GREEN UPS; Individually controllable load banks	
CERTIFICATIONS		
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); Meets FCC Part 15 Category A (EMI); ROHS (Restriction of Hazardous Substances)	
WARRANTY		
Product Warranty Period (Worldwide)	2-year warranty, 3 year with registration. Note: Registration is required for 3-year warranty.	
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 <u>Ultimate Lifetime Insurance</u>	

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