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Model #: SMART2200RML2U

SmartPro 2.2kVA Line Interactive Sine Wave UPS, Extended-run & SNMPWEBCARD options, 2U Rack/Tower, USB, Serial, EPO, 100/110/120V

Highlights



- 2.2kVA / 2200VA line interactive 2U rack / tower UPS
- 100/110/120V output, Corrects brownouts and overvoltages from 83V to 145V
- USB, RS232, EPO and slot for optional SNMP/WEB card, Sine wave output
- Front panel status LEDs with load level and battery capacity display
- Expandable runtime, 97% line-mode efficiency, 3 switched output load banks
- NEMA 5-20P input, 4 5-15/20R & 4 5-15R outlets

Description

2200VA line interactive UPS system for server, network and telecommunications equipment. 2U rackmount or tower form factor with an installed depth of only 19 inches. Expandable battery runtime with optional BP48V24-2U and BP48V60RT-3U external battery packs. Uninterruptible Power Supply (UPS) switches to battery-derived AC output during power failures and extreme voltage variations. Line interactive Automatic Voltage Regulation (AVR) offers two levels of voltage boost during brownouts and one level of voltage cut during overvoltages to maintain regulated 100, 110, 120v selectable output over an input range of 83-145V. Includes NEMA 5-20P input plug and both NEMA 5-15R and 5-15/20R output receptacles. Network-grade AC surge and noise suppression. Network management interfaces support simultaneous communications via USB port, DB9 serial port and SNMPWEBCARD slot. HID-compliant USB interface enables full 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 network interfaces. Includes PowerAlert monitoring software and complete cabling. Emergency Power Off (EPO) interface. Integrated 3-bank PDU switching supports load shedding and remote-reboot of connected equipment. 3-stage metered current monitoring and battery charge status LEDs. Utility power and voltage regulation LEDs. Audible alarm. Self-test. 4-post rackmount accessories included; 2-9U STAND tower kit and 2POSTRMKITWM two post rack & wallmount accessories available. Field-replaceable, hot-swappable internal batteries and external battery packs. Attractive all-black color scheme.

Package Includes

SMART2200RML2U UPS system
PowerAlert software CD-ROM
USB, serial and EPO cabling
Owner's manual

Features

- SmartPro line interactive UPS system is ideal for voice, data, medical and industrial networking applications
- Line interactive Automatic Voltage Regulation (AVR) offers two levels of voltage boost during brownouts and one level of voltage cut during overvoltages
- Maintains continuous operation through blackouts, voltage fluctuations and surges
- Corrects line voltage conditions as low as 83V and as high as 145 back to selectable 100/110/120V nominal values
- Standard internal battery set offers 16 minutes at half load (800w) and 6 minutes at full load (1600w)
- Optional BP48V24-2U and BP48V60RT3U external rack/tower battery packs enable extended runtime operation
- Some external battery configurations require the use of Tripp Lite's [External Battery Configuration Software](#) (see manual)
- Compact rackmount form factor installs using only 2 rack spaces (2U) with a maximum installed depth of only 19 inches
- Ships with all mounting accessories for 4 post rackmount installation
- Optional 2POSTRMKITWM enables 2 post rackmount or wallmount installation
- Optional 2-9U STAND accessory enables small-footprint upright tower placement
- Network interfaces support simultaneous communications via built-in USB, DB9 serial and SNMPWEBCARD slot
- HID compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X
- Included PowerAlert UPS monitoring software supports safe unattended shutdown, monitoring and control via local connected servers, with

the built-in ability to shutdown any number of additional servers over IP

- UPS interface supports on-battery, low-battery, power-restored, AC-voltage, DC-voltage, output current monitoring, battery charge current, battery capacity, AC line frequency, timed inverter shutoff, activate self-test, load bank output power control and remote reboot
- Built-in Emergency Power Off (EPO) interface with cable
- NEMA 5-20P input plug / NEMA 5-15R & NEMA 5-15/20R output receptacles
- Integrated 3 bank switched PDU enables remote outlet management for load shedding or remote reboot of individual load banks (Each bank controls 1 outlet per load bank)
- Front panel LEDs offer current monitoring and battery charge level information
- UPS ships fully assembled in full compliance with DOT regulations, no time consuming connection of internal batteries by user required

Specifications

OUTPUT	
Output Volt Amp Capacity (VA)	2200
Output kVA capacity (kVA)	2.2
Output Watt Capacity (watts)	1600
Output kW capacity	1.6
Output power factor	0.7
Nominal Output Voltage(s) Supported	100V; 110V; 120V
Nominal Voltage details	120V default (voltage selection via back panel dipswitches)
Frequency compatibility	50 / 60 Hz
Output voltage regulation (line mode)	-14%, +6%
Output voltage regulation (Battery mode)	+/- 5%
Built-in UPS output receptacles	4 5-15R outlet(s); 4 5-15/20R outlet(s)
Built-in controllable switched load banks	Three switchable single-outlet 5-15R load banks
Output AC waveform (AC mode)	Sine wave
Output AC waveform (battery mode)	Pure Sine wave
INPUT	
Rated input current (at maximum load)	13.3A (120V), 14.6A (110V), 16.0A (100V)
Nominal Input Voltage(s) Supported	120V AC
UPS input connection type	5-20P
Input circuit breaker	20A
UPS Input cord length (ft.)	10
UPS Input cord length (m)	3

Recommended Electrical Service	20A 120V
BATTERY	
Full load runtime (minutes)	6 min. (1600w)
Half load runtime (minutes)	16 min. (800w)
Expandable battery runtime	Extended runtime supported via optional external battery packs
External battery pack compatibility	BP48V24-2U (limit 1); BP48V60RT-3U (multi-pack compatible)
DC system voltage (VDC)	48
Battery recharge rate (included batteries)	Less than 4.5 hours from 10% to 90%
Replacement battery cartridge (internal UPS battery replacement)	RBC94-2U
Battery Access	Front panel battery access door
Battery replacement description	Hot-swappable, user replaceable batteries
VOLTAGE REGULATION	
Voltage regulation description	Automatic voltage regulation (AVR) maintains line power operation with an input voltage range of 79 to 147
Overvoltage correction	Voltage reduction of 12% applies when input is between 127 and 145 (120V), 116 and 133 (110V), 106 and 121 (100V)
Undervoltage correction	Voltage boost of 12% applies when input voltage is between 96 and 108 (120V), 87 and 99 (110V), 83 and 90 (100V)
Severe undervoltage correction	Voltage boost of 24% applies when input voltage is between 83 and 95 (120V only)
LEDS ALARMS & SWITCHES	
LED Indicators	5 LEDs indicate line power, battery power, overload, voltage regulation and battery low/replace status
Alarms	Audible alarm indicates power-failure, overload and low-battery conditions
Alarm cancel operation	Power-fail alarm can be silenced using alarm-cancel switch; once silenced, alarm will re-sound to indicate low-battery status
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation; rear panel protected switches support nominal voltage selection
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	Adjustable mounting rail kit 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 in primary form factor (height x width x depth / inches)	3.5 x 17.5 x 19
UPS / Power Module dimensions in primary form factor (height x width x depth / cm)	8.9 x 44.4 x 48.3
Installed whole system total rack space height (rack spaces)	2U
Secondary form factor	Tower (requires 2-9USTAND)
UPS / Power Module weight (lbs)	64
UPS / Power Module weight (kg)	29.1
UPS Shipping dimensions (height x width x depth / inches)	9 x 23.5 x 20
UPS Shipping dimensions (height x width x depth / cm)	22.9 x 59.7 x 50.8
Shipping weight (lbs)	72
Shipping weight (kg)	32.7
UPS housing material	Steel
Cooling method	Fan
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)	168.2
Battery mode BTU / hr. (full load)	604.4
COMMUNICATIONS	
Communications interface	USB (HID enabled); DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface
Network monitoring port description	Supports detailed monitoring of UPS and site power conditions
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	2-4 milliseconds
Low voltage transfer to battery power (setpoint)	83 (120V), 87 (110V), 83 (100V)
High voltage transfer to battery power (setpoint)	145 (120V), 133 (110V), 121 (100V)
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 & high efficiency 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)
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 Ultimate Lifetime Insurance

Related Items

Optional Products

Related Model	Description	Qty.
BP48V24-2U	BP48V242U - External Battery Pack for UPS System	1
BP48V60RT-3U	External Battery Pack and Cable. 3U, Expandable, Blue 2-Point Connector	1
DCATV	Network Surge Suppressor - Essential protection for TV/VCR coaxial lines	1
DNET1	Network Surge Suppressor - Essential protection for data and communication lines	1
DTEL2	Network Surge Suppressor - Essential protection for data and communication lines	1
ENVIROSENSE	Monitors temperature, humidity and contact-closure inputs. (Requires SNMPWEBCARD or switched PDU.)	1
PDU1220	Basic PDU / Power Distribution Unit - Safe, reliable power distribution for critical networking equipment	1
PS7224-20	Tripp Lite Power Strip - Multiple outlets wherever you need them	1
SNMPWEBCARD	For remote monitoring and control via SNMP, Web, or Telnet.	1
U022-010	10-ft. USB2.0 A/B Gold Device Cable (A Male to B Male)	1
WATCHDOGSW	WatchDog Service Monitoring / Reboot Software	1
WEXT5-2200-3000	5-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 2200-3000VA or less	1

2-9USTAND	Enables Tower Placement of Rackmount UPS Systems	1
2POSTRMKITWM	Enables 2-Post Rackmount or Wallmount Installation of Select Rackmount UPS Systems	1
MODBUSCARD	For remote monitoring and control via MODBUS protocol	1

More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/en/products/model.cfm?txtModelID=3264.

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