

# Model #: SMART2200RM2U

# SmartPro 2.2kVA Line Interactive Sine Wave UPS, SNMPWEBCARD option, 2U Rack/Tower, USB, Serial, EPO, 100/110/120V



### Highlights

- 2200VA / 2.2kVA / 1920 watt high power factor line interactive 2U rack / tower UPS
- Maintains sine-wave 100/110/120V nominal output over an input range of 83 to 145V
- Network communications supported via HID enabled USB port, DB9 serial port, SNMP/Web card slot and EPO interface
- Current monitoring and switched PDU control via 3 individually controllable outlets
- Input: NEMA 5-20P / Output: 4 NEMA 5-15/20R, 4 NEMA 5-15R (120V)
- 2 year product warranty / \$250,000 Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

# **Description**

2200VA / 2.2kVA / 1920 watt line interactive UPS system with high power factor for server, network and telecommunications equipment. 2U rackmount or tower form factor with an installed depth of only 19 inches. 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; 2-9USTAND tower kit and 2POSTRMKITWM two post rack & wallmount accessories available. Field-replaceable, hot-swappable internal batteries. Attractive all-black color scheme. 2-year warranty and \$250,000 connected equipment insurance; extended warranty and service contracts available.

#### Package Includes

- SMART2200RM2U UPS system
- PowerAlert software CD-ROM
- USB, serial and EPO cabling
- Owner's manual with warranty information

# **Features**

- SmartPro 2200VA / 2.2kVA / 1920 watt line interactive UPS system with high power factor 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
- Offers 13 minutes at half load (960w) and 5 minutes at full load (1920w)
- 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 2-9USTAND 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 sutoff, 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
- 2 year manufacturer's product warranty, \$250,000 ULtimate Lifetime Insurance

# **Specifications**

OUTPUT				
Output Volt Amp Capacity (VA)	2200			
Output kVA capacity (kVA)	2.2			
Output Watt Capacity (watts)	1920			
Output kW capacity	1.92			
Output power factor	0.87			
Output Capacity Details	Output de-rates to 1800w at 110V and 1670w at 100V nominal settings			
Nominal Output Voltage(s) Supported	100V; 110V; 120V			
Nominal Voltage details	120V default (voltage selection via back panel dipswitches)			
Frequency compatibility	50 / 60 Hz			
Frequency compatibility details	Supports 60Hz at 110V and 120V nominal and 50/60Hz (auto-sensing) at 100V nominal.			
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)	16A (120V), 16.4A (110V), 16.7A (100V)			
Nominal Input Voltage(s) Supported	100V AC; 110V AC; 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)	5 min. (1920w)			
Half load runtime (minutes)	13 min. (960w)			
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 83 to 145			
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 SUPPRESSI	ON			

UPS AC suppression joule rating	570				
UPS AC suppression response time	Instantaneous				
EMI / RFI AC noise suppression	Yes				
PHYSICAL					
Installation form factors supported with included accessories	4 post 19 inch rackmount (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)				
Installed whole system dimensions in secondary form factor (height x width x depth / inches)	17.5 x 3.5 x 19				
UPS dimensions in secondary form factor (height x width x depth / cm)	44.4 x 8.9 x 48.3				
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 (U.S., Canada & Puerto Rico)	2-year limited warranty			
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 Ultimate Lifetime Insurance			

# **Related Items**

**Optional Products** 

Product Type	Related Model	Description	Qty.

SNMP Accessories	SNMPWEBCARD	For remote monitoring and control via SNMP, Web, or Telnet.	-
SNMP Accessories	ENVIROSENSE	Monitors temperature, humidity and contact-closure inputs. (Requires SNMPWEBCARD or switched PDU.)	-
Tower Stands	2-9USTAND	Enables Tower Placement of Rackmount UPS Systems	-
Rackmount/Wallmount Kits	2POSTRMKITWM	Enables 2-Post Rackmount or Wallmount Installation of Select Rackmount UPS Systems	-
Extended Warranties	WEXT3-2200-3000	3-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 2200-3000VA	-
Extended Warranties	WEXT5-2200-3000	5-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 2200-3000VA or less	-
Power Distribution	PDU1220	Basic PDU / Power Distribution Unit - Safe, reliable power distribution for critical networking equipment	-
Software	WATCHDOGSW	WatchDog Service Monitoring / Reboot Software	-

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=4403.

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