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# SmartOnline Expandable 2U Rack/Tower UPS System - NAFTA assembled version of SU1500RTXL2Ua

MODEL NUMBER: SU1500RMNAFTA

### Description

1500VA online, double-conversion UPS system for critical server, network and telecommunications equipment. 2U rackmount form factor with an installed depth of only 19 in. Expandable battery runtime with optional BP48V60-3UNAFTA external battery packs. Full-time sine wave 100, 110 or 120V +/-2% output. Uninterruptible Power Supply (UPS) actively converts raw incoming AC power to DC, then re-converts output back to completely regulated, filtered AC output. Operates continuously without using battery power during brownouts to 65V and overvoltages to 138V. NEMA 5-15P input plug and NEMA 5-15R output receptacles. Network-grade AC surge and noise suppression. Zero transfer time between AC and battery operation. 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 network interfaces simultaneously. Includes PowerAlert monitoring software and complete cabling. Emergency Power Off (EPO) interface. Integrated two-bank PDU switching supports load shedding and remote reboot of connected equipment. Three-stage metered current monitoring and battery charge status LEDs. LED display panel easily rotates for better viewing in rackmount or tower configurations. Dataline surge suppression for dialup, DSL or network ethernet connection. Utility power and voltage regulation LEDs. Audible alarm. Self-test. Fault-tolerant auto-bypass mode. 4-post rackmount accessories included; 2-9USTAND tower kit and 2POSTRMKITWM 2-post rack & wallmount accessories available. Field replaceable, hot-swappable internal batteries and external battery packs. Attractive all-black color scheme. Two-year warranty and \$250,000 Ultimate Lifetime Insurance; extended warranty and service contracts available.

#### **Features**

- SmartOnline high-performance UPS system is ideal for critical voice, data, medical and industrial network applications
- True on-line, double-conversion UPS provides perfectly regulated sine wave output within 2% of 100/110/120V (user selectable) under all usage conditions
- . Maintains continuous operation through blackouts, voltage fluctuations and surges with zero transfer time
- Removes harmonic distortion, fast electrical impulses, frequency variations and other hard to solve power problems not addressed by other UPS types
- Corrects line voltage conditions as low as 65V and as high as 138V back to selectable 100/110/120V (+/-2%) values
- . Standard internal battery set offers 17 min. runtime at half load (600W) and 5 min. at full load (1200W)
- Optional BP48V60-3UNAFTA external battery pack increases runtime to 168 min. at half load (600W) and 82 min. at full load (1200W/multi-pack compatible)
- Compact rackmount form factor installs using only 2 rack spaces (2U) with a maximum installed depth of only 19 in.
- Ships with all mounting accessories for 4-post rackmount installation
- Optional 2POSTRMKITWM enables 2-post rackmount or wallmount installation

#### **Highlights**

- 1500VA/1.5kVA online, double-conversion, extended-run 2U rack/tower UPS
- Maintains sine-wave 100/110 or 120V +/-2% output during overvoltages to 138V and brownouts as low as 65V (50/60Hz auto-sensing)
- Simultaneous communications via HID-compliant USB port, serial port, SNMP/Web card slot and EPO interface
- Fault tolerant auto-bypass mode, current monitoring and switched
   PDU control via 2 switchable output load banks
- Input: NEMA 5-15P (120V).
   Output: 6 NEMA 5-15R (120V).
- 2-year product warranty;
   \$250,000 Ultimate Lifetime
   Insurance (USA & Canada only)

#### **Applications**

Ideal for protection of critical
 120V equipment in server rooms,
 internetworking closets and
 telecommunications systems in
 rackmount or tower applications.
 Common applications include
 corporate or departmental
 servers, workstations, hubs,
 routers, bridges, CAD/CAM
 workstations, concentrators, IP
 telephony and traditional PBX
 switching systems.

#### Package Includes

- SU1500RMNAFTA Online
   Double-Conversion UPS System
- PowerAlert Software and cabling
- Mounting hardware for 4 post rack enclosures
- · Instruction manual with warranty



information



• Optional 2-9USTAND accessory enables small-footprint upright tower placement

• Fault tolerant auto-bypass maintains continuous utility output to connected equipment, even in cases where the UPS suffers internal failure and requires maintenance

- · 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, plus 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, UPS nominal voltage adjustment and UPS line to battery power voltage setpoints
- Built-in Emergency Power Off (EPO) interface with cable
- NEMA 5-15P input plug; NEMA 5-15R output receptacles
- Integrated 2-bank switched PDU enables remote outlet management for load shedding or remote reboot of individual load banks (bank one has 2 outlets, bank two has 4 outlets)
- 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
- Supports 2-post rackmount installation with optional 2POSTRMKITWM accessory
- Single-line tel/DSL or network Ethernet surge suppression
- 2-year manufacturer's product warranty; \$250,000 Ultimate Lifetime Insurance

## **Specifications**

OUTPUT		
Frequency Compatibility	50 / 60 Hz	
Output (VA)	1500	
Output (Watts)	1200	
Output Nominal Voltage	120V AC (100/110/120V)	
Output Voltage Regulation	Maintains full-time sine wave output within 2% of selected nominal, less than 3% total harmonic distortion (linear load) / 5% total harmonic distortion (computer load) (Less than 5% THD on-line and on-battery)	
Output Frequency Regulation	Regulates line frequency to 50/60Hz +/- 0.05Hz	
Overload Protection	20A input breaker	
Outlet Quantity / Type	6 x NEMA 5-15R	
Customized Load Management Receptacles	2 controllable load banks support load shedding and remote reboot on demand of locked network devices (bankone has 2 outlets, bank two has 4 outlets)	
INPUT		
UPS Input Cord Length (ft.)	10 ft./3m	
Recommended Electrical Service	120V 15A	
Maximum Input Amps	12	
Input Connection Type	NEMA 5-15P	





Voltage Compatibility (VAC)	120
BATTERY	
Expandable Battery Runtime	Supports extended runtime with optional external battery pack BP48V60-3UNAFTA (multi-pack compatible)
DC System Voltage (VDC)	48
Battery Access	User replaceable, hot swap battery replacement supported via front access panel
Full Load Runtime	5 min. with internal batteries (1200W)
Half Load Runtime	17 min. with internal batteries (600W)
Battery Pack Accessory (Optional)	BP48V60-3UNAFTA (optional)
Replacement Battery Cartridge	RBC94-2U
Typical Battery Lifespan	3-6 years, depending on usage
Battery Charge	Less than 5 hours to 90%
VOLTAGE REGULATION	
Voltage Regulation Description	On-line, double-conversion power conditioning maintains output within 2% of 100/110/120 volts at all times
Overvoltage Correction	Maintains output of selected nominal +/-2% during overvoltages to 138V AC
Brownout Correction	Maintains output of selected nominal +/-2% during undervoltages to 65V AC (at loads greater than 70% undervoltage correction extends to 80V)
LEDS ALARMS & SWITCHES	
Audible Alarm	Multi-function audible alarm with distinctive ring patterns offer notification of backup operation (2 seconds on/0.5 seconds off), low battery warning (1.25 seconds on/0.5 seconds off), overload (sounds continuously), UPS fault (4.2 seconds on / 1 second off), input voltage out of frequency (2.1 seconds on/0.14 seconds off) and high input voltage (2.1 seconds on/0.07 seconds off)
Switches	Includes power off/on switch to enable system turn on (press ON switch), UPS battery test (press ON switch during normal AC operation), buzzer silence (press ON switch during battery operation) and OFF (press OFF switch) - all switch functions require that the switch be pressed and held for longer than 2 seconds, but less than 4 seconds
Front Panel LEDs	LED STATUS DISPLAY: line power (green), on-line (green), bypass (yellow), on battery (green), overload (red), battery low (yellow) - 4 LED LOAD / BATTERY LEVEL DISPLAY (100%, 75%, 50%, 25%). LED display panel easily rotates for better viewing in rackmount or tower configurations.
SURGE / NOISE SUPPRESSION	
UPS AC Suppression Joule Rating	480 joules
EMI / RFI AC Noise Suppression	Yes
AC Suppression Response Time	Instantaneous
Dataline Suppression	Set of 8-wire RJ style interface jacks offer surge suppression for network ethernet or TEL/DSL connection. Pins 1,2,3 and 6 offer ethernet protection starting at 7.5V and the center two wires, pins 4 & 5, offer TEL/DSL line suppression starting at 260V
PHYSICAL	





Shipping Dimensions (hwd / cm)	24.8 x 51.4 x 61
Shipping Weight (lbs.)	54
Shipping Weight (kg)	24.5
Unit Dimensions (hwd / in.)	3.5 x 17.5 x 19
Unit Dimensions (hwd / cm)	8.9 x 44.4 x 48.3
Unit Weight (lbs.)	44.1
Unit Weight (kg)	20
Cooling Method	Built-in cooling fan
Material of Construction	Steel
Form Factors Supported	Rack/Tower (2U)
ENVIRONMENTAL	
Relative Humidity	0 to 95%, non-condensing
Line Mode BTU / Hr. (max.)	612 btu/hr. (87% efficiency line mode)
Battery Mode BTU / Hr. (max.)	667 btu/hr. (86% efficiency battery mode)
COMMUNICATIONS	
WatchDog Compatibility	Yes, compatible with Tripp Lite's Watchdog system service to restore operation to locked equipment through soft reboot of application / OS or hard power off/on reboot of connected equipmentideal for unattended kiosk applications
Network Monitoring Port	Includes USB and DB9 serial ports. Built-in DB9 port offers both enhanced RS-232 enabled monitoring data, plus contact closure monitoring ability. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X.
EPO Port	Supports "Emergency Power Off" via set of dedicated built-in EPO jacks
SNMP Compatibility	Yes, includes slot for optional SNMPWEBCARD accessory (#SNMPWEBCARD)
LINE / BATTERY TRANSFER	
Transfer Time (Line Power to Battery Mode)	Zero, online UPS continuously converts incoming AC to DC, then back to AC. When commercial power is interrupted, UPS maintains continuous output from battery reserves with absolutely no disruption in output AC power
Low Voltage Transfer to Battery Power	Maintains continuous operation during undervoltages as low as 65V (80V at load levels over 70%). Below this switchover point, output is supported from battery-derived AC power
High Voltage Transfer to Battery Power	Maintains continuous operation without using battery power during overvoltages to 138V. Above this point, output is supported from battery derived AC power
SPECIAL FEATURES	
Cold Start	Inverter can be cold started to enable temporary AC output during a power failure
CERTIFICATIONS	
Certifications	Tested to UL1778 (USA), CSA C22.2 No. 107.3 (Canada), NOM (Mexico), Class A (emissions), FCC Part 68 / Industry Canada (telecommunications), RoHS compliant



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WARRANTY		
Product Warranty Period (Worldwide)	2-year limited warranty	
Optional Coverage	3-5 year warranties, plus next-day and on-site warranty coverage available for select opportunities. Contact Tripp Lite for additional information.	
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 Ultimate Lifetime Insurance	

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