

SmartPro 1000VA 1000W 120V Line-Interactive Sine Wave UPS - 8 Outlets, Extended Run, Network Card Option, LCD, USB, DB9, 2U Rack/Tower

MODEL NUMBER: **SMART1000RML2U**



Provides complete battery backup and pure sine wave power output for servers, switches and other high-end distributed IT equipment.

Features

1kVA/1kW/120V Battery Backup for Distributed IT, Telecom or Enterprise Deployments

This rack-mount line-interactive UPS system provides reliable battery backup and AC power protection against blackouts, brownouts, surges and line noise that can damage your valuable IT equipment or destroy data. The SMART1000RML2U is ideal power management for high-end in-rack networking equipment, including servers, VoIP phones, data storage and PoE switches. Unity power factor ensures the most watts possible at each power rating, so you can connect more equipment.

Reliable, Expandable Battery Backup Keeps You Operational Through Power Outages

The field-replaceable, hot-swappable VRLA battery modules allow you to work through short power failures and give you enough time to safely save files and shut down your system in case of a prolonged blackout. Switchover from line to battery power happens within milliseconds to maintain continuous operation of connected equipment without interruption or rebooting. Extra runtime is available by connecting up to four optional extended battery modules (BP48VRM2U, sold separately).

Optional LX Platform Network Management Card Allows Remote Access 24/7

The WEBCARDLXE network interface (sold separately) enables full remote configuration and management, including load shedding, reboots of connected equipment and safe shutdowns. The IP-based Auto Probe feature ensures continuous network uptime by communicating with other network devices, detecting lost connectivity and automatically rebooting IT equipment. Optional EnviroSense2 modules (E2MT, E2MTDO and E2MTHDI, all sold separately) provide a variety of environmental monitoring and control options.

NEMA 5-15R Outlets Protect Your Connected Components

Eight managed 5-15R outlets provide connected equipment with pure sine wave AC output and allow you to monitor power consumption down to the outlet group level. Power provided by these outlets is filtered to protect connected equipment against damaging surges and line noise. Four outlets are grouped into two programmable load banks that let you shed non-critical loads to extend runtime for critical loads. Front and rear cooling fans help protect equipment from overheating.

Highlights

- Protects equipment against blackouts, brownouts, transient surges and line noise
- Keeps equipment running during outages to allow time for file saves and safe shutdown
- Unity power factor ensures maximum power possible at each power rating
- ENERGY STAR 2.0-certified to save electricity, lower costs and protect the environment
- 2-line front-panel LCD with 10 selectable screens reports detailed UPS and site power info

Package Includes

- 1000VA 1000W 120V Line-Interactive UPS
- USB cable
- DB9 cable
- Rack-mounting hardware
- Tower support stands
- Safety instructions
- Advanced User Guide

Automatic Voltage Regulation (AVR) Corrects Low- and High-Voltage Conditions

AVR protects your equipment from incremental hardware damage, data loss and performance problems caused by brownouts. The SMART1000RML2U maintains regulated 120V nominal output during brownouts and overvoltages from 80V to 151V while keeping the battery fully charged and ready to take over in case of power failure.

Premium Protection from EMI/RFI Line Noise Helps Your Equipment Perform Better

This UPS system filters out disruptive electromagnetic and radio frequency interference that can inflict hardware damage or data loss. This EMI/RFI filtering also helps your connected components perform better and last longer.

ENERGY STAR-Certified to Help You Save Money and Protect the Environment

By meeting strict U.S. Department of Energy and U.S. Environmental Protection Agency requirements, this ENERGY STAR 2.0 UPS system provides high operational efficiency to signal a reduction in BTU emissions, save on utility and cooling costs and help protect the environment.

Intuitive Front-Panel Interface for Convenient UPS Operation and Monitoring

The two-line front-panel LCD monitoring screen features 10 selectable screens that allow quick access to a wide range of detailed UPS and site power information. LEDs show UPS status: a green light means utility power is on, an orange light means the UPS is in battery mode and a red light indicates an active alarm or fault. The control panel rotates to accommodate both rack-mount and tower configurations.

Advanced Communications Ports Allow for Automatic Saves and Shutdowns

RS-232 and USB ports connect to a device for a variety of communication options (cables are included). A dry-contact relay port can be programmed through the LCD to provide reliable communications to automation and industrial components. The RPO/ROO port permits emergency shutdown or remote restart of all connected equipment.

Versatile Installation Options

You can mount the SMART1000RML2U in just 2U of space in an EIA-standard 19-inch rack using the included hardware. You can also adapt it for tower installation using the included support stands. The 10-foot power cord with NEMA 5-15P plug connects to a compatible AC outlet.

Specifications

OVERVIEW	
UPC Code	037332160546
UPS Type	Line-Interactive
INPUT	
Input Phase	Single-Phase
Rated input current (Maximum Load)	12A
Nominal Input Voltage(s) Supported	120V AC
UPS Input Connection Type	5-15P
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.1
Recommended Electrical Service	15A 120V
OUTPUT	

Output Capacity (VA)	1000
Output Capacity (kVA)	1
Output Capacity (Watts)	1000
Output Capacity (kW)	1
Power Factor	1
Nominal Voltage Details	120v nominal output in battery mode
Frequency Compatibility	50 / 60 Hz
Output Voltage Regulation (Line Mode)	120V (-10%, +6%)
Load Management Receptacles	Two switchable two outlet 5-15R load banks
Output AC Waveform (AC Mode)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	100V; 110V; 120V; 125V
Output Receptacles	(8) 5-15R
Individually Controllable Load Banks	Yes
BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	6 min. (1000W)
Runtime Half Load (min.)	17 min. (500W)
Expandable Runtime	Yes
Expandable Battery Runtime	Extended runtime supported via optional external battery packs
External Battery Pack Compatibility	 BP48VRM2U <small>(limit 4)</small>
DC System Voltage (VDC)	48
Battery Recharge Rate (Included Batteries)	Less than 4.5 hours from 10 to 90% (typical, full load discharge)
Battery Access	Front panel battery access door
Internal UPS Replacement Battery Cartridge	 744-A3296 <small>(limit 4)</small>
Battery Replacement Description	Hot-swappable, replaceable batteries
VOLTAGE REGULATION	
Voltage Regulation Description	Automatic voltage regulation (AVR) maintains line power operation with an input voltage range of 83 to 147
USER INTERFACE, ALERTS & CONTROLS	
Front Panel LCD Display	Front panel rotatable LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, frequency, operating mode, alarm function and a variety of additional options (see manual for detailed LCD configuration and monitoring options)

Switches	5 pushbutton switches control OFF / ON power status, ENTER, UP, and DOWN selection and ESC control functions
Alarm Cancel Operation	Press the ESC (Escape) button on the front panel display to silence the alarm. Check the alarm condition and perform the applicable action to resolve the condition. If the alarm status changes, the alarm beeps again, overriding the previous alarm silencing
Audible Alarm	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions
SURGE / NOISE SUPPRESSION	
EMI / RFI AC Noise Suppression	Yes
AC Suppression Response Time	Instantaneous
PHYSICAL	
Primary Form Factor	Rackmount; Tower
Rack Height	2U
Cooling Method	Fan
Included Mounting Accessory Description	Included mounting bracket enables installation in 4 post racks. Two ABS mounting stands enables the UPS to be configured in an upright tower orientation.
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount; Tower
Installation Form Factors Supported with Optional Accessories	4 post rackmount short-depth (4-Post-1U-Universal-Adjustable-Rack-Mount-Shelf-Kit-for-Wall-Mount-Racks~4POSTRAILKITWM); Wallmount (2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM)
Minimum Required Rack Depth (cm)	53.34
Minimum Required Rack Depth (inches)	21
Minimum Required Rack Depth with External Battery Pack (cm)	51
Minimum Required Rack Depth with External Battery Pack (in.)	20
Minimum Required Rack Depth without External Battery Pack (cm)	53
Minimum Required Rack Depth without External Battery Pack (in.)	21
Primary UPS Depth (mm)	447
Primary UPS Height (mm)	86
Primary UPS Width (mm)	437
Shipping Dimensions (hwd / in.)	9.40 x 19.60 x 23.00
Shipping Dimensions (hwd / cm)	23.88 x 49.78 x 58.42
Shipping Weight (lbs.)	55.60
Shipping Weight (kg)	25.22
UPS Housing Material	Steel

UPS Power Module Dimensions (hwd, cm)	8.64 x 43.69 x 44.70
UPS Power Module Dimensions (hwd, in.)	3.4 x 17.2 x 17.6
UPS Power Module Weight (kg)	20.18
UPS Power Module Weight (lbs.)	44.5
Unit Dimensions (hwd / in.)	3.400 x 17.200 x 17.600
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	20 to 95%, non-condensing
AC Mode Efficiency Rating (100% Load)	96%
COMMUNICATIONS	
Network Management Cards	 WEBCARDLXE
Network Monitoring Port Description	Network Card Optional
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert Office software at https://tripplite.eaton.com/products/power-alert
Communications Cable	USB and DB9 cabling included
Network Management Card Description	Network management card optional
Communications Interface	Contact closure; DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface; USB (HID enabled)
Emergency Power Off (EPO)/Remote On-Off (ROO)	Yes
LINE / BATTERY TRANSFER	
Transfer Time	1-4ms for normal mode, >5ms for sensitive mode
Low Voltage Transfer to Battery Power (Setpoint)	80
High Voltage Transfer to Battery Power (Setpoint)	151
FEATURES & SPECIFICATIONS	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Automatic Voltage Regulation (AVR); Expandable battery backup; Hot swappable batteries; Remote management; Sine wave output; Surge/noise protection
Green Energy-Saving Features	Greater than 95% efficiency - GREEN UPS; Individually controllable load banks; Schedulable daily hours of economy mode operation
APPLICATIONS	

UPS Applications	Large Network; High-End Desktop/Small Network
STANDARDS & COMPLIANCE	
Product Certifications	CSA (Canada); IEC 62040-2; NOM (Mexico); UL 1778
Product Compliance	FCC Part 15 Class B (USA); RoHS
WARRANTY & SUPPORT	
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