

# SmartOnline 5000VA 4500W 120/208V Online Double-Conversion UPS with Stepdown Transformer and Maintenance Bypass - 5-20R/L6-20R/L6-30R Outlets, L6-30P Input, Network Card Included, Extended Run, 6U

# MODEL NUMBER: SU5000RTFMB











Provides sine wave output, complete battery backup and power protection for mission-critical IT installations, edge networks and other advanced network applications.

#### **Features**

## 5kVA/4.5kW/208V Battery Backup for IT Installations and Edge Networks

This SmartOnline® rack-mount online double-conversion UPS system provides uninterrupted battery backup and AC power protection against blackouts, brownouts, surges and line noise that can damage valuable IT equipment or destroy data. An included stepdown transformer converts your UPS, utility or generator's 208V high-voltage input to 120V low-voltage output to allow connection of a wider range of components.

### Expandable Internal Battery Backup Keeps You Operational Through Power Outages

The field-replaceable, hot-swappable valve regulated lead acid (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. Automatic restart after power outages reduces costly on-site visits. You can also connect up to four extended battery modules (BP180RT, sold separately) for hours of extended runtime.

# Included Bypass Switch Isolates UPS from Connected Loads for Maintenance

The manual bypass lets you remove the UPS for maintenance without disrupting power to the connected load. The bypass reroutes utility power to keep essential equipment operational while you're servicing or replacing the UPS system.

#### Pre-Installed Network Interface Offers 24/7 Remote Access

The WEBCARDLXE network interface turns the SU5000RTFMB into a managed device on your network. It enables full remote configuration and SNMP-based UPS management, including load shedding, safe shutdowns and automated alerts. The IP-based Auto Probe feature ensures continuous network uptime by communicating with other network devices, detecting lost connectivity and automatically rebooting IT equipment without an on-site visit. Optional EnviroSense2 modules (E2MT, E2MTDO and E2MTHDI, all sold separately) provide a variety of environmental monitoring and control options.

#### **Highlights**

- Keeps equipment running during outages to allow time for file saves and safe shutdown
- Pre-installed WEBCARDLXE network card enables full remote access and control
- Stepdown transformer converts 208V input into 120V output for low-voltage equipment
- Included bypass switch allows uninterrupted operation during UPS maintenance
- Optional extended battery modules allow extended runtime to keep equipment powered

#### **Package Includes**

- 5000VA 4500W 208V Double-Conversion UPS
- SUTFMR 120V stepdown transformer
- SUPDMBP6K maintenance bypass
- WEBCARDLXE network card
- USB cable
- RS-232 cable
- Tower support stands
- Cable gland for hardwire connection
- Rack-mounting hardware for UPS and transformer
- Maintenance bypass mounting hardware
- Quick start guide



#### **NEMA Outlets Protect Your Connected Components**

One L6-30R, two L6-20R and 18 5-20R managed outlets provide connected equipment with pure sine wave AC output and allow you to manage 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. The SU5000RTFMB also supports hardwired output.

#### Intuitive LCD Interface Keeps You Informed at a Glance

The menu-driven LCD provides control settings and critical information to help diagnose any issues, including alarm and fault notifications. The interface rotates to accommodate both rack-mount and tower configurations, and it tilts up to 45 degrees for more comfortable viewing.

#### **Advanced Communications Ports Allow for Automatic Saves and Shutdowns**

RS-232 and USB ports connect to a serial-enabled 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 connectors permit emergency shutdown or remote restart of all connected equipment.

#### **Versatile Installation Options**

You can mount the SU5000RTFMB in 6U of space in an EIA-standard 19-inch rack using the included 4-post rail kit or an optional 2-post rail kit (RK2PC, sold separately, one required for each UPS, EBM or transformer). You can also adapt it for tower installation using the included support stands. The 10-foot power cord with NEMA L6-30P plug connects to a compatible AC outlet. A cable gland is included for alternate hardwire input.

# **Specifications**

OVERVIEW		
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UPC Code	037332286369	
UPS Type	On-Line	
INPUT		
Input Phase	Single-Phase	
Rated input current (Maximum Load)	23.3A	
Nominal Input Voltage(s) Supported	200V AC; 208V AC; 220V AC; 230V AC; 240V AC	
Nominal Input Voltage Description	Factory configured to 208V	
UPS Input Connection Type	Hardwire; L6-30P	
Input Circuit Breakers	20A	
UPS Input Cord Length (ft.)	10	
UPS Input Cord Length (m)	3.1	
Recommended Electrical Service	30A	
Plug Type	L6-30P 10ft.	
Total Harmonic Distortion	< 2% THDV on linear load; < 5% THDV on non-linear load	
Input Cord Length (ft.)	10	
Input Cord Length (m)	3.05	



ОИТРИТ		
Output Capacity (VA)	5000	
Output Capacity (kVA)	5	
Output Capacity (Watts)	4500	
Output Capacity (kW)	4.5	
Power Factor	0.9	
Crest Factor	3:1	
Nominal Voltage Details	100V, 110V, 120V, 200V, 208V, 220V, 230V, 240V	
Frequency Compatibility	50 / 60 Hz	
Frequency Compatibility Details	50 or 60Hz, autosensing or configurable as a frequency converter	
Output Voltage Regulation (Line Mode)	+/- 1%	
Output Voltage Regulation (Battery Mode)	+/- 1%	
Output Circuit Breakers	20A breaker protects L6-20R and 5-20R outlets	
Output AC Waveform (AC Mode)	Pure Sine wave	
Output AC Waveform (Battery Mode)	Pure Sine wave	
Nominal Output Voltage(s) Supported	120V; 200V; 208V; 220V; 230V; 240V	
Output Receptacles	(18) 5-20R; Hardwire; (2) L6-20R; (1) L6-30R	
Individually Controllable Load Banks	No	
BATTERY		
Battery Type	Valve Regulated Lead Acid (VRLA)	
Runtime Full Load (min.)	3 min. (4500W)	
Runtime Half Load (min.)	11 min. (2250W)	
Expandable Runtime	Yes	
Expandable Runtime Description	Add up to 4 extended battery modules (EBM). Part number <a class="productLink" href="//tripplite.eaton.com/External-180V-Battery-select-Tripp-Lite-Series-SmartOnline-UPS-Rack-Tower~BP180RT">SmartOnline-UPS-Rack-Tower~BP180RT</a>	
External Battery Pack Compatibility	<a class="productLink" href="//tripplite.eaton.com/External-180V-Battery-select-Tripp-Lite-Series-SmartOnline-UPS-Rack-Tower~BP180RT">BP180RT</a>	
DC System Voltage (VDC)	180	
Battery Access	Battery access door	
Internal UPS Replacement Battery Cartridge	<a class="productLink" href="//tripplite.eaton.com/replacement-battery-for-eaton-9px-3kva-6kva-ups-ebm~744-A1974">744-A1974</a>	
Battery Replacement Description	Hot-swappable, user replaceable batteries. UPS requires 1 Replacement Battery Cartridge.	
VOLTAGE REGULATION		



Voltage Regulation Description	Online, double-conversion power conditioning	
USER INTERFACE, ALERTS & CONTROLS		
Front Panel LCD Display	LCD graphical display	
Switches	RPO / ROO / MBP	
Alarm Cancel Operation	Press ESC to silence the alarm	
Audible Alarm	Audible alarm indicates utility failure, low-battery, overload, other UPS/Battery fault or remote shutdown conditions	
LED Indicators	4 status-indicating LEDs	
SURGE / NOISE SUPPRESSION		
UPS AC Suppression Response Time	0 ms	
EMI / RFI AC Noise Suppression	Yes	
PHYSICAL		
Primary Form Factor	Rackmount; Tower	
Rack Height	6U	
Cooling Method	Fan	
Included Mounting Accessory Description	Includes 4 post rackmount and tower pedestal accessories	
Installation Form Factor Notes	Listed 34" depth includes maintenance bypass installed on the back of the UPS power module. Alternate maintenance bypass installation options are available for short rack depth needs. Relocating the maintenance bypass decreases the unit depth to 27.03".	
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount; Tower	
Installation Form Factors Supported with Optional Accessories	2 post rackmount ( <a class="productLink" href="//tripplite.eaton.com/eaton-2-post-rack-mount-rail-kit-for-9px-ups-RK2PC">RK2PC</a> )	
Minimum Required Rack Depth (cm)	78.74	
Minimum Required Rack Depth (inches)	31	
Minimum Required Rack Depth with External Battery Pack (cm)	79	
Minimum Required Rack Depth with External Battery Pack (in.)	31	
Shipping Dimensions (hwd / in.)	39.45 x 38.00 x 28.50	
Shipping Weight (lbs.)	257.24	
UPS Housing Material	Metal	
UPS Power Module Weight (kg)	48.08	
UPS Power Module Weight (lbs.)	106	
Unit Dimensions (hwd / in.)	10.200 x 17.300 x 34.000	
Unit Weight (lbs.)	206.500	



Unit Weight (kg)	93.67	
ENVIRONMENTAL		
Operating Temperature Range	32° to 104°F (0° to 40°C)	
Relative Humidity	0-95% non-condensing	
AC Mode Efficiency Rating (100% Load)	93	
AC Economy Mode Efficiency Rating (100% Load)	98	
Online Mode Heat Dissipation (BTU/Hr) @ Full Load	1150	
Battery Mode Heat Dissipation (BTU/Hr) @ Full Load	1560	
Audible Noise	<45 dB at 1 meter	
Operating Elevation (m)	<1,000 meters for nominal power; 10% power derating every 1000 meters (up to 3000 meters) at 40°C	
COMMUNICATIONS		
Network Management Cards	<a class="productLink" href="//tripplite.eaton.com/Network-Card-Eaton-Tripp-Lite-Series-UPS-Systems~WEBCARDLXE">WEBCARDLXE</a>	
Network Monitoring Port Description	WEBCARDLXE Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications; not compatible with WEBCARDLX	
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert software at https://tripplite.eaton.com/products/power-alert	
Communications Cable	USB and DB9 serial cables included	
Network Management Card Description	Network management card included	
Communications Interface	Pre-installed network card; RS-232; USB	
LINE / BATTERY TRANSFER		
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode	
Low Voltage Transfer to Battery Power (Setpoint)	176V	
High Voltage Transfer to Battery Power (Setpoint)	276V	
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; On-Line/Double-Conversion; Pure sine wave output; Remote management; Surge/noise protection; Zero transfer time	
Green Energy-Saving Features	High efficiency economy mode operation	
APPLICATIONS		
UPS Applications	Mission Critical Applications	



STANDARDS & COMPLIANCE		
Product Certifications	NOM (Mexico); cUL Listed; EN 62040-2	
Product Compliance	FCC Part 15 Class A (USA); CE (Europe); FCC (USA); ENERGY STAR Qualified; RoHS	
WARRANTY & SUPPORT		
Product Warranty Period (U.S. & Canada)	2-year limited warranty	
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 <a class="insuranceLink" href="//tripplite.eaton.com/support/insurance-policy">Ultimate Lifetime Insurance</a>	
Extended Service Plans	5-year depot exchange plan: TL9SW5Y-6000UCExpedited parts coverage for 5 yearsParts, electronics, and UPS battery coverageNext business day shippingTechnical support5-year onsite plan: TLWFLN75XX-6009UCOnsite parts and labor coverage for 5 yearsParts, electronics, and UPS battery coverage24x7 onsite labor coverage, next-day responseNext-day shippingTechnical supportStartup 24x7: TLSU05NXXX-6009UC Assembly 24x7: TLAS00NXXX-6009UC Onsite preventative maintenance 24x7: TL0005NXXX-6009UC	



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