# Eaton 9PXM 4-20kVA 208/240V N+1 Split-Phase Modular Scalable Online Double-Conversion UPS Cabinet, Hardwired Input / Output, Cybersecure Network Card Option, 21U, TAA

MODEL NUMBER: **9PXM12AAAAA**

Provides sine wave output, complete battery backup and power protection for mission-critical colocation and edge data centers or other advanced network applications.

## Highlights

- Keeps equipment running during outages to allow time for file saves and safe shutdown
- Exclusive ABM technology with 3-stage charging increases internal battery life by 50%
- Optional NETWORK-M2 Gigabit network card enables full remote access and control
- N+X redundancy for power and logic eliminates system-level single point of failure
- Compliant with the Federal Trade Agreements Act (TAA) for GSA Schedule purchases

## Package Includes

- 9PXM12AAAAA 9PXM 208/240V Online Double-Conversion UPS Cabinet
- Mounting hardware
- Owner’s manual

## Features

**Modular, Scalable Battery Backup for Edge Data Centers and Industrial/Commercial Applications**
This 9PXM rack-mount online double-conversion UPS system is superlative power management. Rugged enough to stand up to mission-critical applications, the 9PXM12AAAAA’s dual network card slots and N+X redundancy make it a valuable UPS system for colocation and edge data centers, as well as industrial/commercial applications, including retail, financial, government and education. It features hardwired input and output connections.

**Protects Mission-Critical Equipment against Damage, Downtime and Data Loss**
The 9PXM12AAAAA provides reliable power protection against blackouts, brownouts, surges and line noise that can damage valuable IT equipment or destroy data. The 21U cabinet contains 12 slots, which accommodate a maximum of six power modules with 12 internal battery modules (two per slot) in the remaining six slots. If you choose to install only one power module, you may install up to 22 battery modules in the remaining 11 slots.

**UPS Has a Power Range up to 20kVA**
The UPS cabinet accommodates up to six hot-swappable 4kVA power modules (9PXMSPPM, sold separately) total for 20kVA N+X redundancy that eliminates system-level single point of failure. Power modules may be removed and replaced without powering down the UPS system if it has sufficient redundant capacity. All power modules share the load requirements equally, even if one power module fails or is removed.

**Expandable Internal Battery Backup Keeps You Operational Through Power Outages**
The UPS cabinet accepts two hot-swappable extended battery modules (9PXMBAT, sold separately) per slot. The 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. Exclusive ABM® technology increases battery life by 50 percent and closely monitors battery health to provide advanced notice when batteries need replacing.

**Optional Gigabit Network Interface Offers 24/7 Remote Access**
The NETWORK-M2 Gigabit network card (sold separately) enables full remote configuration and management, including load shedding, reboots of connected equipment and safe shutdowns. UPS

firmware can also be flashed remotely through the NETWORK-M2 without dropping the load, so you don't have to plan for downtime. The card meets both UL 2900-1 and IEC 62443-4-2 standards for cybersecurity, which were developed to address the vulnerability of connected devices to known malware/exploits and to protect business from these risks. The optional Environmental Monitoring Probe Gen 2 (EMPDT1H1C2, sold separately) provides a variety of environmental monitoring capabilities, including temperature and humidity conditions.

**Intuitive Control Panel Keeps You Informed at a Glance**
The UPS control panel includes a graphical LCD, light indicators and function buttons. The control panel provides data and control for the UPS, load status, events, measurements and settings.

**Advanced Communications Ports Allow for Automatic Saves and Shutdowns**
RS-232 and USB ports connect to a serial-enabled or USB-enabled device for a variety of communication options (cables are included). The RPO and ROO connectors permit emergency shutdown or remote restart of all connected equipment. By adding the optional RELAY-MS interface card (sold separately), a dry-contact relay port can be programmed through the LCD to provide reliable communications to automation and industrial components.

**Versatile Installation Options**
You can install the 9PXM12AAAAA in 21U of space in an EIA-standard 19-inch rack using the optional rackmount kit (9PXMRK2, sold separately). Leveling feet and a caster tray are included for secure floor installation.

**TAA-Compliant for GSA Schedule Purchases**
The 9PXM12AAAAA is compliant with the Federal Trade Agreements Act (TAA), which makes it eligible for GSA (General Services Administration) Schedule and other federal procurement contracts.

# Specifications

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| **OVERVIEW** | |
| UPC Code | 743172091390 |
| UPS Type | On-Line |
| **INPUT** | |
| Input Phase | Single-Phase |
| Rated input current (Maximum Load) | 125A |
| Nominal Input Voltage(s) Supported | 110V AC; 120V AC; 127V AC; 208V AC; 220V AC; 240V AC |
| UPS Input Connection Type | Hardwire |
| Plug Type | Hard-wire |
| Input Frequency | 50-70 Hz |
| Power Factor (Input) | 0.99 |
| THDi | <5% at nominal input voltage, full load and battery fully charged |
| **OUTPUT** | |
| Output Capacity (VA) | 20000 |
| Output Capacity (kVA) | 20 |
| Output Capacity (Watts) | 18000 |

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|---|---|
| Output Capacity (kW) | 18 |
| Output Capacity Details | Scalable output capacity from 4kVA to 20kVA |
| Power Factor | 0.9 |
| Crest Factor | 3:1 |
| Nominal Voltage Details | 110V/220V, 120V/208V, 120V/240V, 127V/220V |
| Frequency Compatibility | 50 / 60 Hz |
| Output Voltage Regulation (Line Mode) | <5% steady state |
| Output AC Waveform (AC Mode) | Pure Sine wave |
| Output AC Waveform (Battery Mode) | Pure Sine wave |
| Nominal Output Voltage(s) Supported | 110V; 120V; 127V; 208V; 220V; 240V |
| Output Receptacles | Hardwire |
| Individually Controllable Load Banks | No |
| **BATTERY** | |
| Battery Type | Valve Regulated Lead Acid (VRLA) |
| Expandable Runtime | Yes |
| Expandable Runtime Description |  <a class="productLink" href="//tripplite.eaton.com/Eaton-Internal-Replacement-Battery-for-9PXM-UPS~9PXMBAT">9PXMBAT</a>  (2 required per slot). Additional extended runtime options are available. See pg. 8 of the 9PXM brochure under Documents & Downloads for more details. |
| DC System Voltage (VDC) | 120 per battery string |
| Battery Access | Battery access door |
| Internal UPS Replacement Battery Cartridge |  <a class="productLink" href="//tripplite.eaton.com/Eaton-Internal-Replacement-Battery-for-9PXM-UPS~9PXMBAT">9PXMBAT</a>  |
| Battery Replacement Description | Hot-swappable internal batteries and extended battery modules (EBMs) |
| Battery Management | ABM technology (3-stage charging extends battery service life by 50% and provides advance warning for battery replacement) |
| **USER INTERFACE, ALERTS & CONTROLS** | |
| Front Panel LCD Display | LCD graphical display |
| Switches | RPO / ROO |
| 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 |

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| **PHYSICAL** | |
| Primary Form Factor | Rackmount; Tower |
| Rack Height | 21U |
| Cooling Method | Fan |
| Form Factors Supported | Rack/Tower |
| Installation Form Factors Supported with Included Accessories | Tower |
| Maximum Device Depth (cm) | 88.90 |
| Maximum Device Depth (in.) | 35 |
| Maximum Device Depth (mm) | 889 |
| Minimum Required Rack Depth (cm) | 96.52 |
| Minimum Required Rack Depth (inches) | 38 |
| Minimum Required Rack Depth with External Battery Pack (cm) | 97 |
| Minimum Required Rack Depth with External Battery Pack (in.) | 38 |
| Minimum Required Rack Depth without External Battery Pack (cm) | 97 |
| Minimum Required Rack Depth without External Battery Pack (in.) | 38 |
| Optional Mounting Accessory Notes |  <a class="productLink" href="//tripplite.eaton.com/eaton-9pxm-standard-rackmount-kit~9PXMRK2">9PXMRK2</a>  - Four post rail kit |
| Primary UPS Depth (mm) | 889 |
| Primary UPS Height (mm) | 927 |
| Primary UPS Width (mm) | 445 |
| Unit Dimensions (hwd / in.) | 36.500 x 17.500 x 34.500 |
| Unit Weight (lbs.) | 170.000 |
| Unit Weight (kg) | 77.11 |
| **ENVIRONMENTAL** | |
| Operating Temperature Range | 32° to 104°F (0° to 40°C) |
| Relative Humidity | 5-95% non-condensing |
| AC Mode Efficiency Rating (100% Load) | 94 |
| AC Economy Mode Efficiency Rating (100% Load) | 97 |
| **COMMUNICATIONS** | |

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| Network Management Cards |  <a class="productLink" href="//tripplite.eaton.com/eaton-secure-gigabit-network-card-for-ups-systems~NETWORK-M2">NETWORK-M2</a> ;  <a class="productLink" href="//tripplite.eaton.com/eaton-industrial-gateway-card-mini-slot-for-ups-systems~INDGW-M2">INDGW-M2</a> ;  <a class="productLink" href="//tripplite.eaton.com/eaton-relay-serial-interface-card~RELAY-MS">RELAY-MS</a>  |
| Communications Interface | RS-232; USB |
| **FEATURES & SPECIFICATIONS** | |
| High Availability UPS Features | Hot swappable batteries; Hot swappable UPS power module; Remote management |
| **APPLICATIONS** | |
| UPS Applications | Mission Critical Applications |
| **STANDARDS & COMPLIANCE** | |
| Product Certifications | IEC 61000; UL Listed; cUL Listed |
| Product Compliance | FCC (USA); RoHS; Trade Agreements Act (TAA) |
| **WARRANTY & SUPPORT** | |
| Product Warranty Period (U.S. & Canada) | 2-year limited warranty |

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