Product and service solutions catalog

For network closets and server rooms as well as edge computing and data center applications

Eaton 9PXM UPS
A scalable, modular, flexible solution for a wide range of applications, page 10.
Eaton overview

Eaton is a power management company and provides energy-efficient solutions that help customers effectively manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. We are energized by the challenge of powering a world that demands more.

Rack PDU selector

Choosing the correct rack power distribution unit (PDU) is easier than ever with Eaton’s rack PDU selector tool. With the tool, a user can compare features between selected models, view technical drawings, search by part number or save a previous search.

Use our rack PDU selector tool by visiting Eaton.com/RackPDUselector

UPS and battery replacement selector

The Eaton UPS and replacement battery selector allows you to quickly come up with the right products for your application.

Use our UPS and battery selector tool by visiting Eaton.com/UPSselector
Eaton overview

**Reliable electrical power is not just a convenience; it’s an essential element of doing business. To deliver the competitive advantage our customers demand, Eaton helps enterprises proactively measure and manage the power system as a strategic integrated asset through its lifecycle.**

Eaton’s electrical business is a global leader with expertise in many areas:
- Power distribution and circuit protection
- Backup power protection
- Control and automation
- Lighting and security
- Structural solutions and wiring devices
- Solutions for harsh and hazardous environments
- Engineering services

With more than 100 years of experience in electrical power management, Eaton is positioned through its global solutions to answer today’s most critical electrical power management challenges. From groundbreaking products to turnkey design and engineering services, critical industries around the globe count on Eaton. And, combined with our personal service, support and bold thinking, we are answering tomorrow’s needs today.

**Our story**

Over the years, our innovative portfolio has grown, including solutions from Best Power, B-Line, MGE Office Protection Systems, Phoenixtec, Powerware, Santak, and Wright Line. Our products and software solutions serve the needs of institutional, government, utility, commercial, residential, IT and data center markets worldwide.

**Our portfolio**

Eaton’s portfolio of power quality products contains comprehensive solutions for network closet, server room, data center and multi-tenant data center applications. This includes:
- UPSs
- Surge protection devices
- Power distribution units
- Remote monitoring
- Meters
- Software
- Connectivity
- Enclosures
- Airflow and cable management
- Lighting
- Professional services

Our portfolio is designed to fulfill specific customer requirements, complement new or pre-existing environments and deliver comprehensive solutions.

- Eaton.com/UPS
- Eaton.com/DataCenters

**Our customers**

From desktop and small network closets to the largest data centers, Eaton has been safeguarding the critical systems of businesses across the globe. Eaton solutions provide clean, continuous power to keep business operations flowing. We work with IT and facilities managers to effectively manage power in virtually every business segment, including retail outlets, healthcare organizations, governmental agencies, manufacturing firms, financial institutions and a wide variety of other applications.

- Eaton.com/PQSuccess

**TAA-compliant UPSs**

Eaton is proud to offer TAA-compliant products to our customers. These *Assembled in the U.S.A.* UPSs are designed to be used in a wide range of public sector applications, allowing us to better serve the government’s needs.

Please visit Eaton.com/TAAUPS to learn more about these products.

**Strengthen your connections with resources**

Be on top of the latest IT industry issues and technologies with Eaton’s library of thought leadership articles and white papers.

- Eaton.com/PQ/WhitePapers

**ENERGY STAR partner**

Eaton is proud to be an ENERGY STAR® partner. A joint program established by the U.S. Environmental Protection Agency and the U.S. Department of Energy, ENERGY STAR is intended to help consumers save money and protect the environment through energy efficient products and practices.
Eaton power management solutions

Network closet

Network closets are a critical link for IT networks and infrastructure. Whether a single network closet is your entire IT setup or you have thousands of them scattered across the globe, Eaton has a variety of products and services to help keep your IT systems running efficiently.

**Eaton products to support your network closet**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Protection</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Two-post rack</td>
<td>7: Rackmount UPS</td>
<td>10: Environmental rack monitor and probe</td>
</tr>
<tr>
<td>2: Rack shelf</td>
<td>8: Extended battery module</td>
<td>11: Water sensor</td>
</tr>
<tr>
<td>3: Cable managers (vertical and horizontal)</td>
<td>9: Maintenance bypass module</td>
<td>12: Power management software</td>
</tr>
<tr>
<td>4: Overhead cable tray</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5: Basic rackmount PDU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6: Automatic transfer switch</td>
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</tr>
</tbody>
</table>

Server room

Server rooms continually change to serve shifting business priorities, applications and advancing computing technologies. When space is a premium, Eaton’s compact UPS solutions minimize footprint—whether they’re installed in the rack, at the end of a row or against the wall. Our rackmount solutions also provide more power per rack unit.

**Eaton products to support your server room**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Protection</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Enclosure</td>
<td>5: Rack power module</td>
<td>8: Intelligent rackmount PDU</td>
</tr>
<tr>
<td>2: Open frame rack</td>
<td>6: Maintenance bypass module</td>
<td>9: Environmental rack monitor and probe</td>
</tr>
<tr>
<td>3: Cable managers (vertical and horizontal)</td>
<td>7: Rackmount UPS</td>
<td>10: Power management software</td>
</tr>
<tr>
<td>4: Overhead cable tray</td>
<td></td>
<td>11: Water sensor</td>
</tr>
</tbody>
</table>
Your data center is the backbone of your business, and Eaton has efficient, innovative, scalable, mission-critical solutions to meet your specific needs. We provide reliable distribution equipment, network power systems and UPSs to ensure a steady flow of high-quality power—because an outage of just a few seconds can mean catastrophe in a data center.

Eaton products to support your data center

**Organization**
1. Enclosure
2. Cable managers (vertical and horizontal)
3. Overhead cable tray

**Protection**
4. End-of-row/in-row UPS
5. Battery cabinet
6. Distribution cabinet
7. Busway
8. Airflow chimney
9. Automatic transfer switch

**Management**
10. Intelligent Rackmount PDU
11. Enterprise management software
12. Environmental rack monitor and probe
13. Water sensor
14. Smoke detector
15. UPS and power distribution services and support

Look for these symbols at the top of each page to help determine which products will provide the best solution for your needs. Note: PoS stands for point of sale.
**Eaton's RACKPACKIT solutions**

**Simplified power management**

Selecting the right power management solution can be challenging. Eaton’s answer to the many questions that come along with choosing the correct power management solution is simple: RACKPACKIT™. Eaton has bundled key elements into a single part number, delivering the right solution for any IT deployment to help users effectively organize, protect and manage the environments of their choosing. With onsite installation and assembly, RACKPACKIT is a smart choice for users looking to simplify their power management experience.

- **Eaton’s Intelligent Power Manager (IPM) software** provides all the tools required for monitoring and managing power within your virtual environment.
- **The environmental monitoring probe** provides temperature and humidity readings to reduce the chance of overheating within your environment.
- **Cable management** enables effective organization within the rack, improving airflow and rack access.
- **The industry leading 9PX UPS and extended battery module** provide reliable, versatile and efficient backup power.
- **Eaton’s ePDU G3 Metered Input rack PDU** features best-in-class technologies, including ±1% billing grade accuracy, an advanced LCD pixel display, a hot-swap meter and the ability to operate at high 140°F (60°C) temperatures.
- **The enclosure** balances the requirements of airflow management, greater power demands and cable management.

**Additional integration within the stack**

Eaton’s RACKPACKIT solutions have been validated by leading IT vendors, meaning that the user can be confident that their solution is maximizing the power infrastructure capacity within their IT environment—regardless of which RACKPACKIT option they deploy.

**Save time**

Reduce the need for advanced configuration with one part number

**Save money**

Ordering a bundled solution saves money

**Peace of mind**

Avoid after the fact configuration mistakes

**Flexibility**

Multiple options covering various applications

For more information, visit [Eaton.com/RACKPACK](http://Eaton.com/RACKPACK)
3-series, 5S, 5SC

Powerware series

Eaton 3S
350–750 VA
Delivers high efficiency and energy-saving battery backup and surge protection for your premium home and office equipment—ready to go right out of the box.

Typical applications:
• Premium small office/home office computers and accessories
• VoIP equipment
• Home entertainment devices

Eaton 5S
550–1500 VA
Energy-efficient UPS with user-friendly LCD screen and convenient form factor delivering surge protection and battery backup.

Typical applications:
• Premium small office/home office computers and accessories
• Home entertainment devices
• VoIP equipment

Eaton 5SC
500–1500 VA
Energy-efficient UPS with user-friendly LCD screen, USB port for automatic HID identification on Windows®, Mac® and Linux®, best price to performance ratio in its class and a small footprint for easy integration within small spaces.

Typical applications:
• Small business servers
• Network-attached storage (NAS)
• Network equipment
• ATMs
• Ticket machines and kiosks

CUSTOMER TESTIMONIAL

“I’m really glad to have found Eaton, and to have found a company that’s willing to give me a warranty like that.”
– Arland Head, director of information technology, LeBlanc’s Food Stores, referring to the Eaton 3S UPS

Product details: PC, workstation and home A/V UPS

<table>
<thead>
<tr>
<th>Features</th>
<th>3S 350–750 VA</th>
<th>5S 550–1500 VA</th>
<th>5SC 500–1500 VA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form factor</td>
<td>Standalone or wall-mount</td>
<td>Tower</td>
<td>Tower</td>
</tr>
<tr>
<td>Start-on-battery</td>
<td></td>
<td></td>
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<tr>
<td>Audible alarms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serial or USB port</td>
<td>USB</td>
<td>USB</td>
<td>USB</td>
</tr>
<tr>
<td>Eaton UPS companion software</td>
<td></td>
<td></td>
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<tr>
<td>Data line surge protection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three-year warranty (with registration)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extended warranty (optional)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plug and play feature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EcoControl for energy efficiency (750 VA only)</td>
<td></td>
<td></td>
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<tr>
<td>Sinewave output on battery</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Icon-based LCD</td>
<td></td>
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<tr>
<td>ABM technology (50% longer battery service life)</td>
<td></td>
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</tr>
</tbody>
</table>
Eaton 5P

**1500–3000 VA**

Delivers reliable enterprise class backup power, available in tower, rackmount, and compact rackmount form factors.

**Available with lithium-ion batteries:**

Provides integrated battery management systems with extended battery life and improved recharge capability allowing you to set it and forget it.

**Typical applications:**

- Brand and remote offices
- Edge computing environments

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Eaton 5PX

**1000–3000 VA**

Provides an integrated power management solution for any IT environment with extended runtime capabilities, 99 percent efficiency and two managed outlet segments.

**Typical applications:**

- IT network wiring closets
- Medical systems
- Communications/VoIP network systems

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CUSTOMER TESTIMONIAL

“The 5PX was exactly the solution we needed for our current location and size. It was affordable, easy to self-install and it can grow and move with us.”

– Marty Sellers, director of IT & facilities, Synapse Wireless

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**Product details: series 5, network and server tower UPS**

<table>
<thead>
<tr>
<th>Features</th>
<th>5PX 1000–3000 VA</th>
<th>5P 550–3000 VA</th>
<th>5P Compact 700–1440 VA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form factor</td>
<td>Tower, 2U rackmount or 3U rackmount</td>
<td>Tower, 2U rackmount or 3U rackmount</td>
<td>2U rackmount</td>
</tr>
<tr>
<td>Sine wave output</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Intuitive LCD interface</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>ABM technology (60% longer battery life)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Load segment control</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Hot-swappable batteries</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Start-on-battery</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Audible alarms</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Serial or USB port</td>
<td>Both</td>
<td>Both</td>
<td>USB</td>
</tr>
<tr>
<td>Intelligent Power Software Suite*</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Network cards available</td>
<td>Mini-Slot</td>
<td>Mini-Slot</td>
<td>Mini-Slot</td>
</tr>
<tr>
<td>Data line surge protection</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Remote emergency power-off (REPO)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Power distribution unit (optional)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Extended battery modules (optional)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>TAA-compliant models</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Three-year warranty (with registration)**</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Extended warranty (optional)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

* Intelligent Power Protector also works with these units and provides many of the same monitoring and management capabilities of Intelligent Power Manager.

**Models with lithium-ion batteries come with a five-year warranty (with registration).**
9SX and 9PX

**Eaton 9SX**

*700–3000 VA*

An extended runtime UPS that provides 28 percent more wattage and a reliable double-conversion topology in a convenient tower form.

**Typical applications:**
- Medical testing equipment
- IP-based security systems
- Farming and food processing automation
- Industrial control
- Point-of-sale networking
- Small to medium business networks
- Elevator controls

**Eaton 9PX**

*700 VA–11 kVA*

Latest UPS innovation from Eaton features a graphical LCD interface, extended battery life and informed power management capabilities for easy management.

**Typical applications:**
- Servers
- Voice/data networks
- Storage systems
- Cisco switches and servers

**Eaton 9PXSP**

*5–11 kVA*

Split-phase models offer both 120V and 208V output without a transformer, saving vertical rack (U) space, weight and cost.

**Typical applications:**
- Servers
- Voice/data networks
- Storage systems
- Cisco switches and servers

This product is TAA-compliant

The 5-6 kVA (top) and 700–3000 VA (bottom) versions of the 9PX both include a 4-post rail kit in the box.

The 9PX can withstand harsh electrical environments, but still works in a variety of applications—industrial automation, K-12, healthcare, IT and more
Eaton 9155
8–15 kVA
Provides industry-leading power density and a 75 percent footprint reduction versus comparable UPS solutions; internal batteries provide up to 350 percent more runtime and offer 13 percent more capacity at equivalent power ratings.

Typical applications:
• Data centers
• Centralized servers
• LAN gateways
• Clustered PCs
• Enterprise telecommunications and engineering systems

Eaton 9PXM
4-20 kVA
Combines the highest level of reliability with the lowest cost of ownership in a scalable, modular UPS. Configurable to fit eight- or twelve-slot tower enclosures, the 9PXM can be easily converted into 14U or 21U of rackmount space.

Typical applications:
• Mission-critical applications
• Internet service providers
• E-commerce networks
• Data centers
• Enterprise telecommunications systems
• Rack equipment

Product details: series 9, network and server room UPS

<table>
<thead>
<tr>
<th>Features</th>
<th>9SX 700–3000 VA</th>
<th>9PX 700 VA to 11 kVA</th>
<th>9155 8–15 kVA</th>
<th>9PXM 4-20 kVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form factor</td>
<td>Tower</td>
<td>Rack/tower</td>
<td>Tower</td>
<td>Rack/tower</td>
</tr>
<tr>
<td>Sine wave output</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>ABM technology (50% longer battery life)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Intuitive LCD interface</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Hot-swappable batteries</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Extended battery module (optional)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Load segment control</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Data line surge protection</td>
<td>●</td>
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<td>●</td>
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<tr>
<td>Serial or USB port</td>
<td>●</td>
<td>●</td>
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<td>●</td>
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<tr>
<td>Start-on-battery</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Audible alarms</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Intelligent Power Software Suite</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Communication bay</td>
<td>Mini-Slot</td>
<td>Mini-Slot</td>
<td>Mini-Slot</td>
<td></td>
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<tr>
<td>Remote emergency power-off (REPO)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Power distribution module (optional)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>External maintenance bypass (optional)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>TAA-compliant</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>High-efficiency mode</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Extended warranty (optional)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

1. Extended battery module not available for the 9SX 700 VA Tower UPS.
2. Includes bypass switch, available with and without bypass switch on the 9155.
Feature focus

ABM technology—extend the life of your batteries and optimize recharge time

Most UPS manufacturers offer constant trickle-charge on their batteries, which degrades them and reduces their service life by as much as 50 percent. In contrast, Eaton’s ABM technology uses sophisticated sensing circuitry and an innovative three-stage charging technique that extends the useful service life of UPS batteries while optimizing battery recharge time. It also provides advance notice of the end of useful battery service life to allow you ample time to hot-swap batteries without ever having to shut down connected equipment.

Extended battery runtime—increase your backup time

Your application may require several hours of backup time, Eaton can deliver it with extended battery modules (EBMs).

Load segments—extend battery time when necessary

Using our protection software, you can independently control load segments, which are groups of receptacles on the rear panel of the UPS. This feature enables you to maximize battery power and provide orderly shutdown and startup of critical equipment. During a power outage, you can shut down non-critical devices, extending available battery time to critical equipment.

Eaton single-phase UPS onsite service plans (US)

Features:

- 24x7 onsite coverage (anytime hours)
- Covers all parts and labor for both electronics and batteries
- Available as 8-hour or next-day response
- Easy-to-order 2-year warranty upgrade or extension for up to 5 years of coverage

Warranty Upgrade

- 2-year length
- 24x7, 8-hour or next-day response

Flex Plan Post Warranty

- 1- or 3-year length (up to 5 years total)
- 24x7, 8-hour or next-day response

Details:

- Eaton single-phase UPS factory warranty is 2 years from date of purchase
- Eaton’s 2-year warranty upgrade adds onsite coverage to standard factory warranty
- Eaton offers 1-and 3-year FLEX service plans for post-warranty coverage
- Purchase warranty upgrades concurrently with product purchase along with FLEX plans for up to 5 years of onsite coverage
- Purchase external battery coverage to complement UPS coverage

1See Eaton limited warranty for specific details: 3 and 5 Series UPS models offer a 3-year warranty with online registration
Power management software

Manage smarter with Eaton power management software

Whether you’d like to monitor a single UPS, integrate with leading virtualization platforms or monitor an entire data center Eaton has a power management software solution for you.

Visual Power Manager (VPM) or Visual Capacity Optimization Manager (VCOM) can be deployed to monitor power across your distributed network to better visualize your power infrastructure and take action as needed to maintain continuous uptime of your IT infrastructure. When paired with Intelligent Power Manager (IPM) you can create a robust power management software solution that can monitor and automate risk mitigation actions, keeping your infrastructure running at full capacity.

Visual Power Manager

Monitor IT power infrastructure

VPM excels at remotely monitoring large and distributed deployments of power devices. The easy-to-use, visual interface provides a live floorplan view with alarm notifications for up-to-the-minute health status on your power infrastructure.

- Visual floor layout with alarm notifications help to quickly identify power issues
- Custom reporting allows you to deliver intelligent reports to administration
- Multitenancy user access control allows you to set access levels per user, building or area
- Integrates with mixed vendor environment
- Control PDU outlets and UPS load segments to remotely power on, off and reboot hung equipment

Eaton.com/VPM

Visual Capacity Optimization Manager

Monitor IT and facilities power infrastructure

VCOM provides our greatest level of business intelligence by monitoring both IT and facilities power infrastructure which makes it ideal for large or multisite management. VCOM features capabilities designed to reduce data center operational expenses, mitigate risk through data analysis, and improve system and application reliability.

Contains all VPM features plus:

- Full end-to-end facilities monitoring from utility entrance to IT application
- Workflow management reduces time to deployment with capability to generate projects, tasks and work orders
- Capacity planner uses “what if” scenarios to ensure capacity for upcoming projects
- Impact/root cause analysis shows which applications are affected during a power event

Eaton.com/VCOM
Power management software

IPM is an on-site policy-based automation software platform that triggers advanced remediation actions—shedding non-critical workloads to extend battery runtime—during a power event to ensure that critical equipment remains running as long as possible.

- Shutdown, suspend, power on/off and migrate individual or groups of virtual machines (VM)
- Extend battery runtime by suspending non-critical VMs and servers
- Safely shut down and securely restore high-availability environments without crashing VMs or host server
- Trigger VMware Site Recovery Manager during power event to avoid data loss
- Regulate rack temperature and other environmental issues
- Manage Eaton and third-party power devices

IPM features an intuitive user interface and puts power management at your fingertips.
## Eaton power management software comparison

<table>
<thead>
<tr>
<th>Features</th>
<th>Intelligent Power Manager (IPM)</th>
<th>Visual Power Manager (VPM)</th>
<th>Visual Capacity Optimization Manager (VCOM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supported UPS nodes</td>
<td>Up to 500</td>
<td>Up to 500,000</td>
<td>Up to 500,000</td>
</tr>
<tr>
<td>Supported rack PDU nodes</td>
<td>Up to 200</td>
<td>Up to 500,000</td>
<td>Up to 500,000</td>
</tr>
<tr>
<td>Auto discovery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass firmware upgrade tool</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass node-settings configuration tool</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Send email notifications</td>
<td></td>
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<tr>
<td>Monitor third-party devices</td>
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<tr>
<td>Event-based PDU outlet control</td>
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<tr>
<td>Virtualized host shutdown</td>
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<tr>
<td>Gracefully shutdown compatible storage</td>
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<tr>
<td>Power capping of compatible servers</td>
<td></td>
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<tr>
<td>Targeted VM migration</td>
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<tr>
<td>Targeted VM graceful shutdown</td>
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<tr>
<td>Shares data with VMware’s vRealize Operations</td>
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<tr>
<td>Trigger actions from third-party devices</td>
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<tr>
<td>Integrated reporting engine</td>
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<tr>
<td>Microsoft Active Directory integration</td>
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<tr>
<td>Supports LDAP authentication</td>
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<tr>
<td>Floor and rack layout builder</td>
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<tr>
<td>Dashboard with trend analysis</td>
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<tr>
<td>Power aggregation through the power chain</td>
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<tr>
<td>Multi-tenant user access control</td>
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<tr>
<td>Full end-to-end facilities monitoring (utility entrance to IT application)</td>
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<tr>
<td>Workflow management (project, task, work order)</td>
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<tr>
<td>Security Studio – cameras, locks, etc.</td>
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<tr>
<td>3D visualization – facilities equipment, IT rack and hardware, office space, chilled water, cable tray</td>
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<tr>
<td>Project planner (IT and facilities deployment tracking)</td>
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<tr>
<td>Capacity planner / “what if” scenarios (by project or ad hoc scenarios)</td>
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<tr>
<td>Impact/root cause analysis</td>
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<tr>
<td>Asset warranty/service deployment tracking maintenance log</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Advanced port mapping (power + network and fiber)</td>
<td></td>
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<tr>
<td>VM / Host status and manual control of start, stop, enter / exit maintenance mode</td>
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<tr>
<td>ITSM integration (ServiceNow, Remedy, etc.)</td>
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<td></td>
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<tr>
<td>Site level dashboards and business intelligence</td>
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</tbody>
</table>
Power management software

**Foreseer® software**

Foreseer software provides vendor-independent power and energy infrastructure integration capabilities. In addition, Foreseer comes with features that can help companies reduce energy consumption and unplanned downtime due to the failure of critical power, environmental, safety or security systems.

Foreseer software was developed from the ground up to support thousands of devices, connections, device parameters and data logging. It is fully scalable to support environment types all over the world—ranging from a single data center to multiple facilities. It facilitates monitoring of infrastructure pieces, including HVAC, UPS, power distribution systems (meters, motor control, variable frequency drives, etc.), generators, fire-detection, security systems and other communicating sub-systems from hundreds of manufacturers—all on one screen. For more information, visit Eaton.com/Foreseer.

**Benefits:**

**Data center efficiency**  
Calculates DCiE and PUE  
As IT managers are more focused on the energy efficiency of their data centers, the Foreseer software’s Power Xpert® reporting option automatically calculates Data Center Infrastructure Efficiency (DCiE) and Power Usage Effectiveness (PUE). These industry-standard efficiency metrics help IT managers understand and track how efficiently their data center is running and how effective their improvement efforts have been to date.

**Energy cost allocation**  
Fair share utility cost distribution  
The cost of energy has always been of significant concern for those tasked with managing departmental budgets. Foreseer software provides users with energy usage by individual circuit, so each device can be a part of the energy management strategy. It even allocates electrical cost to individual and branch circuits, which can then be assigned to individual users of a department or device.

**Power density**  
Pinpoint hot spots in your data center  
As racks proliferate and expand from TCP/IP networks, servers and other elements of the infrastructure are placed into smaller areas, making power density a critical measurement. Foreseer software manages power density by device—for a single rack, floor or an entire building—alloing you to identify overloaded racks and incorrect power drains due to device failure.

**Maintenance scheduler**  
Eliminate the hassles  
The Foreseer software maintenance scheduler offers the ability to preset scheduled (weekly or periodic) maintenance windows within the system to disarm selected devices on which maintenance will be performed. Disarming the devices allows continued monitoring and archiving during the maintenance period, while disabling alarms and preventing unnecessary notification of personnel.

**Foreseer sightline**  
Predict developing situations  
Safety, environmental and electrical problems can be hazardous and costly, often resulting in unplanned downtime. Worse yet, these events seem to arise without warning. With Foreseer Sightline, users can project events, energy usage, environmental problems and safety issues—among other trends—based on current patterns up to 180 days into the future. With trending data in hand, users are able to define thresholds that will alert them to developing issues well before an actual alarm condition is reached.
Power management connectivity

Solutions for the changing global customer landscape

Eaton’s connectivity products are accessory hardware options that link UPS products with external communication devices. These connectivity products help ensure communication compatibility with a variety of external devices through the web, serial, relays or SNMP. Featured Eaton connectivity devices below.

**Gigabit Network Card**

**First UPS connectivity device certified to UL's stringent cybersecurity standards (UL 2900-2-2)**

The Eaton Gigabit Network Card (Network-M2) is Eaton’s latest UPS connectivity device that delivers IT professionals with new and exciting capabilities and features. With faster speed and enhanced cyber security, the Gigabit Network Card improves power system reliability by providing warnings of pending issues to administrators and helping to perform orderly graceful shutdown of servers and storage. The new network card works with Intelligent Power Manager (IPM) v1.61 (and all later versions) to improve business continuity by triggering policies configured to keep mission-critical applications running in the event of power or environmental anomalies, including virtual machine relocation or automated disaster recovery action.

Eaton.com/Network-M2

**Environmental Monitoring Probe**

Eaton also offers a the Environmental Monitoring Probe (EMP) Gen 2 (EMPDT1H1C2), a second-generation environmental monitoring probe for the Gigabit Network Card. The new EMP maintains all the functionality of the previous generation of sensors (temperature, humidity and dry-contact monitoring) while adding the ability to be daisy-chained (up to 3 per host), allowing multiple sensor connection to a single host. This enhances the richness of rack-level environmental data for the top, middle and bottom of the rack. The new sensors feature a translucent case and integrated LED to positively identify the status of each sensor at a glance while walking the aisles.

Eaton.com/EMPGen2

For more information on all Eaton network connectivity devices, visit Eaton.com/NetworkConnectivity
**Power management connectivity**

**Power Xpert UPS card**

The Power Xpert UPS card allows you to connect your Eaton Series 9 UPS directly to your Ethernet network and the Internet. With its built-in web server, the Power Xpert Gateway UPS card provides UPS information remotely, without additional software.

**Power Xpert Gateway UPS card homepage.**

**Benefits**

- Remotely monitors critical data such as: actual UPS energy usage, THD, multiple UPS modules with one card, load segment status, percent of full load, output power, battery status, alarm status
- Enables you to configure the shutdown agent, set up UPS shutdown schedules and test and control the UPS remotely
- Automatically maintains data, interval and event logs with time stamp for power and energy parameter analysis
- Integrates your UPS into existing building management or network management systems including Power Xpert Software (monitoring software)
- Expands your UPS’ LCD to a fully-graphical, web-enabled, remote monitoring system

**Power Xpert PDP card**

The Power Xpert PDP card allows you to connect your Eaton power distribution products directly to your Ethernet network and the Internet. With its built-in web server, the Power Xpert Gateway PDP card provides power distribution products’ (PDP) information remotely, without additional software.

**Power Xpert Gateway PDP card—panel view.**

**Benefits**

- Remotely monitor and record energy usage data to reveal opportunities and verify results of efficiency improvements
- Configure the Energy Management System through graphical, easy-to-navigate screens rather than fumbling through a small LCD
- Web-enabled monitoring of power quality data down to the branch circuit level allows for safely tagging and monitoring individual circuit information
- Automatically maintains data, interval and event logs with time stamp for power and energy analysis
- Ability to integrate your PDP into existing building management or network management systems including Power Xpert Software monitoring software
- Expands your PDP’s LCD to a fully-graphical, web-enabled, remote monitoring system
Rackmount power distribution

Eaton PDUs

Eaton offers the largest selection of rackmount power distribution units available on the market, called Eaton PDUs. This complete suite of power distribution products—including 0U, 1U and 2U form factors—is designed specifically for data centers and IT environments and provides manageability, control and power consumption monitoring at the outlet level.

Eaton.com/PDU

Eaton’s Metered Outlet and Managed rack PDUs

Eaton offers two leading technologies for power distribution management—Metered Outlet (MO) and Managed (MA). Both technologies offer outlet-level monitoring of critical factors, such as power usage in kilowatt hours, current and voltage with a high degree of accuracy. This level of monitoring provides the granularity to understand your energy consumption, which is vital in colocation situations or when deciding where to allocate more power.

Eaton PDU software options

Eaton offers a number of software management tools for you based on the number of PDUs you need to manage.

<table>
<thead>
<tr>
<th>Software</th>
<th>Rack quantity best supported</th>
<th>Type of software</th>
<th>Application cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web browser/email</td>
<td>1–25</td>
<td>Included requires web browser</td>
<td>Included</td>
</tr>
<tr>
<td>SNMP</td>
<td>1–1,000</td>
<td>Integrates rack PDUs to third party software</td>
<td>Low-High*</td>
</tr>
<tr>
<td>IPM</td>
<td>1–200</td>
<td>Eaton’s automatic remediation monitoring offering</td>
<td>Low-Med</td>
</tr>
<tr>
<td>VPM</td>
<td>1–5,000</td>
<td>Eaton’s IT power management offering</td>
<td>Low-Med</td>
</tr>
<tr>
<td>VCOM</td>
<td>1–5,000</td>
<td>Eaton’s full DCIM offering</td>
<td>Med-High</td>
</tr>
</tbody>
</table>

* depends on cost of third party solution

Hot-swap meter is able to be replaced without powering down the rack (ePDU G3).
Rackmount power distribution

Daisy-chain capability allows up to eight ePDUs to share the same network connection and IP address reducing network infrastructure cost by 87.5%.

Understanding rack PDU technologies

Eaton rack PDUs are distinguished for their quality, dependability and versatility. Eaton rackmount PDUs provide best-in-class power distribution, multiple technology options, an arrangement of outlets for every region, and the ability to manufacture custom PDUs.

Eaton G3 ePDU technologies

<table>
<thead>
<tr>
<th>Feature (Value)</th>
<th>Basic</th>
<th>Metered*</th>
<th>Managed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated IEC outlet grips (Easily secure plugs to prevent accidental disconnect)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Low-profile form factor (Provide zero interference into the rail space)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
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<tr>
<td>High 140°F (60°C) operating temperature (Reduce cooling costs and maintain full functionality)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
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<tr>
<td>Color-coded outlet sections (Simplify load balancing)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Ease of installation (Quick, easy and flexible for most environments)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>One percent billing grade accuracy (Optimize power utilization)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Advanced LCD pixel display (Allow for easy IP setup and troubleshooting)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Daisy chain (share network connection/IP address) (Reduce network infrastructure costs by 87.5%)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Hot-swap meter (Remove meter without disruption)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Phase and section metering (Control power utilization)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Measure power consumption at outlet level (Acquire precise data to make informed decisions)</td>
<td>☑️</td>
<td>Metered outlet only</td>
<td>☑️</td>
</tr>
<tr>
<td>Measure level 3 power usage effectiveness (PUE) (Transform billing into revenue or utility discounts)</td>
<td>☑️</td>
<td>Metered outlet only</td>
<td>☑️</td>
</tr>
<tr>
<td>Outlet switching (Remote on, off and reboot saves time and costs)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
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<tr>
<td>Turn off unused outlets (Control unauthorized use)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
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<tr>
<td>Remote site management (Save time from on-site visits)</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
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<tr>
<td>Group reboot for A and B feed (Save time by controlling grouped power supplies)</td>
<td>☑️</td>
<td>☑️</td>
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</tr>
</tbody>
</table>

*Includes Metered Input and Metered Outlet models

Daisy-chain capability allows up to eight ePDUs to share the same network connection and IP address reducing network infrastructure cost by 87.5%.

Eaton.com/ePDUG3
Eaton HD rackmount PDUs

The Eaton High Density (HD) rack PDU builds off the best-in-class power distribution of Eaton’s ePDU G3 platform. With all the features you have come to expect from G3 rack PDUs, the HD rack PDU offers the additional benefits of configurability, high density outlets and color choices.

Eaton.com/HD

Configure your input three ways

Optimize your PDUs for your IT environment with configurable options for input plug and cable, input cord length and cord entry position. With over 5,000 total combinations, you can create exactly what works best for your data center.

Reduce risk with color options

Easily identify where power is coming from and where it is going to with configurable color chassis and alternating phase outlets. When it is that easy to distinguish between A and B power feeds, losing power to your IT equipment is less of a risk.

Complete control over your outlets

With more outlets than any other PDU, the HD rack PDU not only gives you the number of outlets you need, it also gives you the type of outlets you need.

The HD PDU offers two configurable outlet modules with IEC and NEMA options. Mix and match the modules to configure up to 54 outlets in 42U, with the option for fewer outlets to fit smaller racks.

To configure your own HD rack PDU, please visit, RackPDUselector.Eaton.com/Configure
Floor-based power distribution

Flywheel solutions
When you need to ensure maximum productivity and system availability, Eaton’s flywheel solutions can help. Our battery-free energy flywheel storage system bridges the power gap—acting as either a backup power source or backup battery source if power quality or delivery is disturbed. Flywheel solutions can also act as effective UPS battery enhancements, battery backup systems or UPS battery replacements for traditional systems.

Flywheel solutions are an environmentally friendly alternative to batteries, offering reduced energy consumption for cooling, elimination of lead use in facilities and a long lifespan of more than 20 years.

System Bypass Module (SBM)
Four decades of experience in paralleling UPS systems is incorporated in this newest SBM. For use with multi-module 9395 systems, the new Eaton SBM allows the paralleling of up to 32 Eaton 9395 UPSs. The switchgear enclosure encompasses a centralized static switch along with system-level circuit breakers for bypass, UPS system output and maintenance, or wraparound bypass functions. Four ratings are available as standard: 2000A, 2500A, 3000A and 4000A. The customizable cabinet features a 10-inch color LCD screen for display status for up to eight uninterruptible power modules and provides an intuitive user operation interface. To enhance flexibility, the system controls/monitoring section may also be deployed in custom or third-party switchgear to ensure the most reliable monitoring and user-friendly controls are included with alternative power circuit components.

Remote Power Panel (RPP)
The Eaton RPP allows for electrical expansion without the need for costly electrical rework. By simply feeding the RPP distribution module from the existing transformer or panel board, distribution capacity can be expanded by up to 168 pole positions.

Use flywheel solutions to take advantage of:
- Minimal space requirements due to the flywheel’s high power density in a small, light footprint
- Low costs made possible by reduced maintenance requirements and long service intervals
- High efficiency, operational integrity and reliability—with 20 times the reliability of a single bank of batteries
- Simple plug-and-play installation

Hot Tie Cabinet
The Eaton Hot Tie Cabinet is an ideal solution for two UPS modules powering two separate loads, allowing you to transfer the load of one unit to the other so the loads are always protected. The Hot Tie Cabinet has become more important than ever with the development of Powerware Hot Sync technology, as it enables two systems whose units are paralleled with Hot Sync to work together for an even greater level of redundancy and protection.

Power Distribution Unit (PDU)
The Eaton PDU series can be easily expanded as power needs change by adding up to three side-cars. This expands the distribution capacity from 84 to up to 252 circuit breaker pole positions. Each PDU can be configured to meet your specific needs for isolation, voltage transformation, harmonic reduction and voltage regulation with virtually limitless distribution options. Built-in system monitoring and diagnostics facilitate load balancing and warn of potential threats to your critical equipment.

Static Transfer Switch (STS)
The Eaton STS is a high-speed switch that can transfer electrical loads from one AC power source to another in a fraction of a single electrical cycle. The STS eliminates the chance of a loss of power to critical loads by properly coordinating with the electrical distribution system. During a fault condition, the STS continues to conduct current, allowing downstream circuit breakers to work selectively.
Success story

Dakota State University (DSU) is one of the most technically advanced campuses in the Midwest. At DSU, the professors are committed to taking hands-on learning to a whole new level—an approach that even the National Security Administration (NSA) endorses. DSU is one of only 19 universities to be designated a National Center of Academic Excellence in Cyber Security by the NSA, and among a select few that offer cyber operations as an undergraduate major.

That commitment to innovative, hands-on approaches to education was put to the test when DSU was designing an academic service room. When building out the 13x26 square foot room, DSU went to great lengths to ensure that the environment was packed with all of the devices students will encounter in the real world—including those that are power-related. “When you’re trying to teach students how data centers work, you are really constrained by not having the ability to accurately discuss power requirements and all of the components that go along with it,” Dr. Kyle Cronin, assistant professor of cyber operations, points out. “We wanted to do more than just talk about it.”

Thanks to a partnership with Eaton, the university was able to deploy a comprehensive Eaton power solution within the server room. First installing eight Eaton rack enclosures, the university outfitted each with an Eaton 9PX UPS, both a metered and a managed rack PDU, an environmental monitoring probe, and a Network Card-MS communications card. The solution safeguards dozens of servers, switches, routers, firewalls and other network gear within the server room.

“Our big claim to fame is that we offer a super hands-on academic experience; our students are immersed in it,” Cronin confirms. “The Eaton equipment allowed us to go this next step.”

Indeed, thanks to the Eaton gear, students are gaining invaluable experience, completing a wide range of tasks such as deploying and provisioning equipment, running cable, monitoring power conditions, and viewing live power metrics with the PDUs.

“Students aren’t just talking about a concept, they are interfacing with PDUs and UPSs,” Cronin emphasizes, “and that’s where we’re really happy with the equipment we ended up with, as opposed to some black box that just sits there with some outlets on it.”

While the venture was driven in large part by academic desires, Cronin acknowledges there was also a practical side to the investment. “Even though this is a nonproduction environment, we still wanted to protect all of the equipment,” he explains, adding that the sensitive electronic devices require a high level of shielding against South Dakota thunderstorms and other hazardous weather conditions.

Mother Nature’s power hazards are no match for the Eaton 9PX UPS, which maximizes availability with extended battery runtime options, hot-swappable batteries, an internal bypass and an optional maintenance bypass. In addition to exceptional reliability, the UPS also provides more real power (watts) to protect equipment, while leaving room for expanding IT systems.

In the near future, DSU also plans to install Eaton’s power management software, which will enable students to engage with a variety of UPS monitoring and management tools. “The idea is that students will leave DSU, hit the work force, and will be able to truly walk into a position with a managed service provider or networking business thanks to the knowledge they have acquired here,” says Cronin.

With Eaton solutions at DSU, knowledge is power—and power is knowledge
Data center and facility UPS overview

With a rich history of technical innovation and proven performance, Eaton’s data center and facility UPS products continue to personify its pioneering spirit in the power quality industry. Whether you’re designing or procuring a UPS, models can be deployed around the world since they’re designed to meet global requirements. That means the same UPS can be installed anywhere—from Argentina to Russia, China to South Africa or the United States.

Leading sustainability
- Highest efficiency ratings lower utility costs
- Lowest total cost of ownership and lifecycle carbon footprint
- Smallest footprint and weight
- Lowest transportation and installation costs

Stronger power performance
- Lowest input total harmonic distortion (THD) enhances compatibility with upstream power systems
- Lowest output THD
- Optimum generator sizing
- PFC power supply compatibility

Highest reliability and availability
- Powerware Hot Sync wireless paralleling
- Easy capacity test
- Superior battery management
- Inherent redundancy
- Scalable architecture that adapts to increasing power requirements

Robust manageability
- Superior control and connectivity

Beyond technology: Eaton multi-module UPS solutions

In the world of large power systems, single-unit solutions are becoming less common. High-capacity power needs, redundancy requirements, integration into building management system (BMS) and network management systems (NMS) for system monitoring, data gathering, and extended battery backup time often lead customers to a multi-module system that can include redundant UPSs, software, power distribution and battery systems tailored to individual needs.

Designing, testing and implementing a multi-module system requires engineering knowledge and experience in making sure everything works together as anticipated, every time. That’s where Eaton excels—starting with state-of-the-art technology and pairing it with rigorous design, testing and implementation standards guarantees Eaton multi-module systems deliver the highest level of reliability.

When you choose a custom Eaton solution, you come to the Customer Witness Test Center in Raleigh, North Carolina, or Helsinki, Finland, to see your system put through its paces. This gives you hands-on experience and the confidence that the system will operate efficiently and trouble-free from day one.

Eaton Customer Witness Test Centers test power modules, including UPS, PDU, switchgear, static transfer switches and battery cabinets. They also test third-party equipment interfaces, a crucial capability in a multi-vendor world. In addition to testing the individual devices, the entire system is tested, ensuring end-to-end interoperability.
Feature focus

Eaton three-phase UPS products are packed with features and available options to integrate easily with a wide array of site requirements. Industry-leading technologies and performance allow consultants and contractors to exceed customer expectations and deliver more value.

For example, Energy Advantage Architecture is a suite of options, technologies and designs that allow specifying engineers and facility managers to get the best possible performance from their UPS. Options like Energy Saver System (ESS) dramatically increase UPS efficiency without sacrificing protection, reducing energy costs and putting money back into the budget. In addition, site designs using 400V can capture savings in equipment and operating costs that can dramatically improve end-to-end facility efficiencies.

Eaton’s 93PM: small footprint and weight

Eaton’s 93PM UPS system combines efficiency, reliability and vertical or horizontal scalability with an eye-catching design. With lower TCO and ease of deployment and management, the 93PM is a space-saving and flexible solution, offering unprecedented backup power in a small footprint.

Big power, small footprint

**Eaton 93PM**
Weight = 869 pounds
22 in. x 42 in.

**Competitor product**
Weight = 1400 pounds
41 x 39 in.

The Power Xpert 9395 high performance UPS model

The 9395 high performance UPS shown below can be configured as an 1100 kW capacity or 825 kW for N+1. The width of this configuration is a compact 170.1
Data center and facility UPS

Energy Saver System (ESS)

Eaton three-phase UPS solutions have always delivered excellent energy-efficiency, helping facilities save thousands in energy costs over traditional UPS designs. Now with the available ESS option, Eaton three-phase UPSs achieve more than 99 percent efficiency no matter how large or small the load. This additional energy savings is achieved through advanced power core technology and continues to provide the load with maximum protection. Unlike traditional “eco” modes, ESS is not just a utility bypass. The load is always protected.

Learn more at Eaton.com/ESS

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Eaton 9355
10–30 kVA
Delivering efficient, reliable performance in a sleek tower half the size of most competitive units on the market today, the 9355 can be deployed to protect small data centers, multiple servers, educational facilities, critical machinery in factories and retail applications.

Emergency Lighting UPS (UL 924) models now available from 8–30 kVA.

Eaton 93E
20–60 kVA
The Eaton 93E UPS delivers the most efficient power quality solution in three key areas: space, power and cost. Engineered for maximum efficiency, the 93E delivers up to 98 percent efficiency while maintaining a small physical footprint. With internal batteries up to 60 kVA, the 93E provides an all-in-one solution that also reduces the complexity of installation and startup.

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CUSTOMER TESTIMONIAL

“We have no extra space here and we were going to have to retrofit another area to accommodate a new UPS. But because of the 9355’s form factor, we were able to put in right into our computer room and we didn’t have to modify any of our other systems around it.”

– Pat Abban, senior technician, Genzyme
Data center and facility UPS

Eaton 93PM

10–400 kW

The Eaton 93PM UPS combines unprecedented efficiency and reliability with an eye-catching design. A space-saving, scalable and flexible device that’s as easy to deploy as it is to manage, it’s the perfect three-phase white or grey space solution for today’s data center.

- **Lowest total cost of ownership:** Conserves valuable data center floor space with its compact footprint and internal redundancy design. Reduces cost and unexpected future growth risks with its vertical scalability, enabling you to scale as you grow. Reduces power and cooling OPEX through industry-leading energy-efficiency.

- **Easy deployment:** Maximizes deployment flexibility by providing flexible configurability.

- **Easy management:** Provides easier access to detailed status information through its large, user-friendly LCD touchscreen interface. Integrates with the leading virtual platforms through its full suite of power management and connectivity software. Increases uptime through its 24x7 remote monitoring and reporting capabilities.

Eaton.com/93PM

CUSTOMER TESTIMONIAL

“The 9395 alone provides about a 10 percent gain in efficiency over our previous unit. And with ESS, of course, that goes all the way to 99 percent, which would be about a 15 percent increase. It’s huge.”

– Kevin Dorhmann, chief technology officer, CoSentry

Power Xpert 9395

200–1200 kVA

Now available in a high performance model, the Power Xpert 9395 UPS boasts industry-leading efficiency and scalable battery runtimes, providing more power to support more racks in large data center environments within the same small footprint.

Eaton.com/9395
Data center and facility UPS

**Eaton BladeUPS**

5–60 kW

The revolutionary Eaton BladeUPS power quality system expands power protection from 8 kW to 60 kW (N+1) in a single industry-standard 19-inch rack. Equally important, the BladeUPS provides this robust, compact solution while generating 75 percent less heat than the competitors’ legacy end-of-row solutions.

**Benefits**

- Reduces single points-of-failure with an intelligent bypass design that eliminates human error
- Provides Powerware Hot Sync paralleling that enables scalability and reliability through a “peer-to-peer” paralleling relationship
- Features hot-swappable battery modules and electronics
- Uses off-the-shelf options, including line cord kits, X-Slot cards, extended battery modules, racks, sub-distribution and rack power strips

**BladeUPS Preassembled Systems**

Eaton has expanded the BladeUPS product offering and simplified it for easy customization, shipping and installation. The Eaton BladeUPS Preassembled System is a true turnkey solution for growing data center needs. Depending on your power requirements, preassembled systems can be ordered with one to six BladeUPS units installed to offer the right level of power protection, while still providing for future growth. All you have to do is bring power to the unit and perform the simple start-up procedure.

**Benefits**

- Factory pre-tested system accelerates installation and minimizes onsite testing requirements
- Save up to 20 percent in shipping costs
- Modularity and scalability allow the system to be easily moved
- Top- and bottom-entry models available
- The top-entry models are ideal for data center environments that do not have a raised floor and offer a flexible option when facing moves, additions or changes to the data center

12 kW BladeUPS models are ENERGY STAR qualified.

Rack Power Module (RPM)

The RPM provides plug-and-play primary power distribution from a three-phase input source to secondary power distribution devices, or directly to IT equipment. Delivering up to 36 kW of power, the 3U RPM can be deployed in the same rack with the UPS and IT equipment; saving the same and expense of a dedicated infrastructure rack. The resulting architecture has fewer cables to manage, fewer distribution point to monitor and greater flexibility for IT personnel to make changes without an electrician.

**Benefits**

- Four input options and 15 available outlet plates, including single- and three-phase, straight and locking receptacles, IEC and NEMA receptacles, 120V and 208V
- Front access to breakers and a large, color LED display to view power consumption and input power
- Single-power distribution from a freestanding panelboard reduces the amount of wiring that needs to be run, cutting infrastructure costs
- Locking receptacle outlets eliminates the need for a licensed electrician to add more capacity
Prefabricated power solutions

Eaton's prefabricated power solutions combine several products to support shorter lead times, faster deployment, lower total cost of ownership and reduced risk during design and implementation. And since they're pre-configured setups that are each tested as a system, you get consistent, repeatable designs that can be mirrored across multi-phase and multi-location sites.

Eaton.com/Prefab

Ideal for all sizes of data centers, these solutions come in three configurations:

1. **Connected**
   - UPS modules and switchgear
   - Up to 5,000 amps
   - Customizable

2. **Centralized**
   - UPS, batteries and switchboard on a skid
   - Up to 550 kVA

3. **Contained**
   - UPS, batteries, switchgear, HVAC units and fire and safety equipment in a container
   - 825 and 1100 kVA power ratings
Surge suppression

Eaton SPD and PSPD series

The SPD and PSPD series offers the most advanced surge protection with an array of features, options and configurations. Applying these units throughout the facility will ensure equipment is protected with the safest and most reliable surge protection devices available. They can be installed directly into electrical assemblies or externally side-mounted to equipment.

Eaton SPD and PSPD series side-mount surge protection device providing superior retrofit surge protection.

SPD series devices can be integrated into a panelboard or UPS Bypass to provide optimum surge protection without the need for an additional enclosure.

Power factor correction capacitors and filters

Capacitor and electronic means of power factor correction provide well-known benefits to electric power systems, including correcting the power factor, reducing poor power factor utility bill penalties, voltage support, system capacity release and reduced system losses. A high power factor signals maximum use of electrical power, while a low power factor leads to purchasing more power to obtain the same load kW, which you pay for in various ways on your utility bill.

Visit Eaton.com/PFC for more information and to request a free power factor site evaluation.

The Eaton Unipump is a non-fused capacitor based product designed to be used at the motor locations of outdoor irrigation, oil field installations or other weather restricted areas requiring power factor correction at the motor load.

Unipaks are capacitor-based products designed to be used when fixed, static capacitance (wall or floor mounted) is needed within parts of your electrical system.
Power Xpert Meter 4000/6000/8000

Eaton’s Power Xpert Meter 4000/6000/8000 series represents world-class power monitoring that reduces day-to-day operating costs and helps avoid costly business interruptions. The meters combine state-of-the-art technology with an embedded web server, advanced power diagnostics, data trending and performance benchmarking, along with a twist-n-click LCD for simplicity and ease of use.

- Free download of Power Xpert Meter Profiler to trend and predict energy usage
- Embedded web server
- Automatic power quality analysis and trigger setting with built-in ITIC performance curve
- Comprehensive power, energy and demand measurements for 138 standard data points logged
- At-a-glance view of power quality analysis with patented Power Quality Index gauge
- Industry-standard communication protocols to support a multitude of configurations and third-party software: HTTP, FTP, Modbus RTU, Modbus TCP, SNMP, SMTP, NTP, COMTRADE

Power Xpert Meter 2000 series

The meters combine state-of-the-art technology with waveform viewing and recording, data trending and performance benchmarking. The embedded web server enables users to surf to the meter over the Internet via a standard web browser. This platform offers adaptability such as field-upgradeable firmware and optional digital inputs/outputs and analog outputs.

Identify power quality problems to help

- Protect motors from damage
- Preserve the integrity of processes and batches
- Prevent blown capacitor bank fuses
- Protect transformers and conductors from overheating

IQ 250/260 series

The IQ 250 and IQ 260 electronic meters provide capabilities you wouldn’t normally expect in an affordable, compact meter—such as fast sampling rate and accurate metering for a full range of power attributes. The meter can be configured either from the easy-to-read display or remotely (accessible via a Power Xpert Gateway) via included configuration software. In addition, built-in slots allow for upgrades to input/output option cards.

- Comprehensive metering
- High-end accuracy
- Large, easy-to-read display
- Local or remote configuration
- Industry-standard communication protocols (Modbus)
- Mix-and-match input/output options
- Field-upgradeable

IQ 100 series

Providing the first line of defense against costly power problems, Eaton’s IQ 100 electronic power meters can perform the work of an entire wall of legacy metering equipment utilizing today’s technology. Eaton’s IQ 100 meters use 24-bit AD converters that sample at more than 400 samples per cycle and meet ANSI C12.20 standards for accuracy of 0.5 percent. With such high-performance measurement capability, these meters can be confidently used for primary revenue metering and submetering applications.

Applications

- Utility and commercial metering
- Substations, industrial facilities, power generation sites and campuses
- Submetering
- Load studies and voltage recording
- Analog meter replacement

Enclosed Meters

Designed for the IQ 35M, IQ 150, IQ 250/260 and Power Xpert Meter 2000, Eaton’s single and multi unit Enclosed Meter offers mounting and installation flexibility, especially in retrofit applications where no metering compartment or mounting space is available in the existing electrical distribution equipment or where installation time is a premium. Factory-designed and wired, Eaton’s Enclosed Meter offers savings in labor and installation costs since input current and voltage wiring as well as I/O wiring is pre-wired to terminal blocks inside the enclosure. To ensure safety, Eaton’s Enclosed Meter includes a primary breaker for line voltage that can be turned off during meter maintenance.

Applications

Standalone, enclosed meters are ideal for new metering applications where no metering existed previously, for retrofit installations or where ease of installation is required.
The Eaton RS Enclosure
Designed to organize, protect and manage critical IT applications

Easy-to-configure solution for IT equipment. Eaton offers three RS configurations to best meet your application, making it easy to choose the solution that best fits your needs. These include solutions for server, networking and colocation installations.

Save money
With cable and airflow management options available in each RS configuration, you can save money on cooling costs, as well as cable management accessories.

Save time
Quickly install and adjust brackets for full- or half-height rack PDUs. The enclosure’s seamless integration with Eaton ePDU G3 rack power distribution units makes installation easy.

Reduce risk
The RS platform provides enhanced physical security—a major concern for multi-tenant data center applications. The highly secure combination lock protects valuable IT resources from internal and external threats.

Eaton.com/RS
Racks and accessories

Eaton Paramount enclosure system
Our premier enclosure platform, Paramount not only supports an industry leading 2,200 pounds of equipment in a fully welded frame, but it is also designed to adapt to the ever-changing requirements of the data center through a scalable and modular approach. Speed of deployment is essential to any company when considering time to market. Paramount’s modularity and building block design ensures quick reconfigurations and minimizes downtime, protecting your initial investment.

- Superior airflow control and management
- Flexible platform allows for ever-changing requirements, protecting your initial investment
- Industry leading weight capacity of up to 2,200 pounds handles even the heaviest server equipment
- Eaton’s patented Heat Containment System (HCS) cools up to 25 kW or more per enclosure, without the expense of adding supplemental CRAC units to your data center
- Full complement of accessories to handle non-rackmount devices
- Industry leading cable access and management

Eaton Vantage S2 enclosure system
The Vantage S2 enclosure platform was designed with change in mind, which is why so many Fortune 500 companies have standardized on it. This scalable enclosure solution helps store the latest technology without having to change enclosure platforms, maximizing your original investment.

- Provides superior airflow with its fully perforated front and rear door system
- Fully welded frame rated for a 2,000-pound static and dynamic load capacity handles even the heaviest server equipment
- Guaranteed compatibility with TIA/EIA-310-D* standard sized equipment
- Eaton’s patented heat containment system cools up to 25 kW or more per enclosure, without the expense of adding supplemental CRAC units to your data center
- Full complement of accessories to handle non-rackmount devices
- Industry leading cable access and management

Compatibility Guarantee
We guarantee that all 19” TIA/EIA-310-D compliant equipment will physically fit into the Paramount and Vantage S2 enclosures.
Racks and accessories

Eaton two-post racks
These durable racks are designed to meet a variety of application requirements from enterprise data centers to colocation facilities to network closets. Cable management is one of the critical functions of two-post racks, and we offer vertical and horizontal management systems to increase flexibility and optimize performance.

Eaton two-post seismic racks
The seismic 19-inch, two-post relay rack is designed for areas where shock and vibration are a factor, such as power plants and airports. Seismic enclosures protect your electronics by providing enhanced frame strength and rigidity with reinforced dual uprights. Eaton’s seismic two-post rack it’s tested to GR-63-Core shock and vibration to a load of 900 lbs.

Eaton four-post racks
Whether you’re working in a network closet, server room or data center, a few common needs exist where enclosures are concerned: accessibility to equipment, sufficient airflow, design flexibility and cable management, to name a few. Eaton’s four-post rack addresses these needs while also accommodating other Eaton equipment and cable management accessories.

Eaton wall mount cabinets and racks
Eaton’s wall mount equipment is a cost effective, secure way to mount communications cabling, networking gear and related equipment to conserve floor space. It’s designed to work with network, IT, telecom, datacomm, A/V or other applications. Wall mount cabinets provide a secure enclosure with protection from tampering and other hazards, while open-frame swing gate wall mount racks offer easy access to and unrestricted airflow around mounted equipment.
Blanking panels

Blanking panels provide a quick, easy and cost-effective solution to optimize air circulation within an enclosure while maintaining high aesthetics. Eaton offers blanking panels in a variety of styles including tool-less, mechanically fastened, clear and with cable pass through options in steel as well as plastic. The width meets EIA-310-D standards and they come in various heights (depending on style). Most panels are bulk packed in quantities of 10 and 100.

- Significantly reduces re-circulation of hot exhaust air to the equipment inlet
- Adds to the overall aesthetics of the data center
- 1U, 2U, 3U, 4U, 5U, 6U, 7U, 8U and 20U (depending on style)
- EIA-310-D compliant for 19’ equipment
- Color: Black steel, black plastic, clear plastic
- Available in tool-less, mechanically fastened, clear and cable pass-through styles

Brush strip models allow routing of cables through the panel.

Adjustable blanking panels, offered in two sizes (7-12U, 12-22U), easily adapt to your hardware requirements.

Raised floor grommets

By installing Eaton’s raised floor grommets, you can optimize the effectiveness of existing cooling equipment and manage increasing heat loads. The raised floor sealing system specifically addresses bypass airflow and its detrimental effect on data center cooling.

- Increased energy efficiency and predictability—eliminates bypass airflow while maintaining a consistent subfloor plenum pressure
- Flexible, thoughtful design—overlapping serrated fingers and optional plastic ties adapt to any size or shape cable bundle; ties ensure a complete and lasting seal by providing tension against the cabling
- Superior performance—delivers a faster and greater ROI than any other solution on the market

Non-permeable material allows maximum pressure to be maintained in the sub-floor plenum when cables are installed, minimizing bypass airflow.
Airflow management, containment and cages

Aisle containment

End of row doors

End of row doors create more efficient cold aisles by blocking an obvious cold-air escape route and entry for hot air re-circulation and air mixing. This allows you to set a higher overall temperature within the data center thus saving energy and extending hardware life.

• Variety of door models—choose from three styles of doors—single-swing, double-swing café style and sliding doors
• Ease of installation—field-installable, rack-integrated and freestanding options available
• Rack agnostic—flexible enough to install almost anywhere on any manufacturer’s brand enclosure
• Improve efficiency and predictability—increases cold air intake efficiency, from the bottom of the enclosure to the top, within the cold aisle
• Minimize air re-mixing—cost-effectively minimize air mixing between the hot and cold aisle while keeping the uniform cold air supply in front of the servers for a consistent temperature top to bottom

Aisle containment ceilings

Eaton’s ceiling system is comprised of clear panels made from materials with multiple ratings, including UL94 V-0, ASTM E 84, FM4910 or antistatic. The panels mount easily to the top of Paramount, Vantage S2 and third-party enclosures. This ceiling system is modular and scalable to accommodate differences in rack heights and row spacing. The self-supporting structure allows for easy rack changes within the row. Fire-activated ceiling panels ensure quick row access for critical fire suppression.

CRAC collars

The CRAC collar for downflow systems is integral to Eaton’s total containment solution. By containing and directing the warm plenum air to your air conditioning system you increase efficiency and equipment performance while reducing overall energy consumption.

The CRAC collar features an integrated design, comprised of steel panels that mount easily to the top of any CRAC unit with simple installation. Collars allow front filter installation and service and completely integrate with optional airflow dampening devices. This closed-loop integration of the air conditioning supply and exhaust completes the modular airflow containment strategy in the data center, resulting in a more energy-efficient operation.

Our space-efficient sliding end of row doors open with little effort and offer a self-close option. They are a great choice when end-of-row space is at a premium and air containment is required at the end of a cold or hot aisle.

Single-swing end of row doors are a simple, cost-effective solution to improve efficiency while lowering overall operating costs.

Eaton’s double-swing café style doors help achieve aisle containment while offering quick entry and exit.

Tool-less access panels allow quick and easy installation on your existing CRAC units.
Airflow management, containment and cages

Eaton Heat Containment System (HCS)

Eaton’s HCS is a simple, scalable and low cost rack-based solution to cool up to 25 kW or more per enclosure without the expense of adding supplemental CRAC units to your data center. This patented technology is available on Eaton’s Paramount and Vantage S2 enclosure systems and can also be field retrofitted to most manufacturers’ enclosures. The HCS contains and directs the heat exhaust of your IT equipment through the chimney that is attached to the top rear of the enclosure. The hot air is then ducted to your existing CRAC units through a plenum ceiling or high air returns.

Independent Containment System (ICS)

The culmination of Eaton containment strategies is its patent-pending ICS, a free-standing, scalable, sustainable and vendor-neutral containment solution for high-density computing environments.

Designed to provide maximum flexibility in all environments, the ICS, assembled within the footprint of a standard aisle, is constructed with a tubular steel frame. The frame’s structure is designed to be freestanding and meets seismic NEBS Zone 4 standards. Additionally, it accepts a variety of Eaton’s End of Row Doors including café style, swing and sliding models.

Aisle ceilings are constructed of a light-weight steel frame and clear Lexan panels allowing ambient room light to illuminate the ICS aisle, eliminating the need for energy-consuming supplemental lighting. The ceiling accepts 2’ x 2’ aisle ducts which can be added anywhere on the ceiling structure as IT loads increase.

Optional chimney fans can increase airflow up to 2600 CFM.

- Scalable—adapts to existing infrastructures to increase rack utilization as your capacity demands grow
- Predictable—separates hot exhaust air and cold supply air, dramatically increasing the reliability of the data center
- Efficient—allows hotter air to return directly to the CRACs, increasing their efficiency by operating at a higher Delta T (ΔT)
- Reliable—extends existing cooling capacity throughout the data center, freeing up stranded assets and lowering operational costs
- Flexible—does not require you to alter existing enclosure locations and is also field-installable on third-party enclosures

Photo courtesy of Humana
Airflow management, containment and cages

Active Airflow Manager

Eaton’s HCS pressure based system with active airflow, when combined with best practices, improves performance metrics considerably. Allocating the correct amount of airflow at known intake locations is key to reducing energy consumption while increasing equipment performance. Best practices such as blanking panels, proper perforated tile placement and the reduction of bypass airflow must be employed to ensure desired results.

- SNMP managed device with user-friendly web interface
- Controller continuously monitors pressure differentials to ensure that air entering the enclosure and server is properly removed
- Local LEDs indicate fan status including fan fail and over temperature
- Manage up to 64 peer Active Airflow Managers via Ethernet
- Two integrated temperature sensors with e-mail alert capabilities
- Redundant power input; C13 plug type is required for each input, 90-240 Vac supplied by enclosure PDU(s)
- Controller is RoHS compliant

HCS for third-party racks

Convert existing enclosures to the HCS to eliminate incremental capital expense associated with having to add more CRAC units or other supplemental cooling.

- Implement heat containment with minimal interruption to operations by building up from existing enclosures without having to re-route or disconnect cables and power
- By isolating the hot exhaust air from the cold supply air, you can load more than 25 kW of equipment in an enclosure
- Requires no additional air conditioners or other space consuming supplemental equipment at the perimeter of the data center, in-row or overhead
- Eliminates chaos airflow results in a more predictable operating environment, allowing you to drive efficient energy use and create a reliable infrastructure for moves, additions and changes

Data center cages

Eaton cages provide secure partitioning for data centers, providing the ultimate level of security for your valuable information systems. Built to the durable standards of our enclosure systems, the rugged steel construction ensures structural integrity. Its unique design, with 3/8” perforations, is large enough to provide ample ventilation while maintaining a secure structure.

- Secure data center segmentation
- Modular design for easy reconfiguration
- Multiple standard height and width options (7’, 8’, 9’,10’ heights and multiple widths)
- Ceiling and wall-mounting capabilities
- Multiple access control options
- 1 1/2” clearance for floor tile access
Service and support solutions

Computational fluid dynamics modeling services

Eaton’s Computational Fluid Dynamics (CFD) Modeling Service provides a comprehensive approach to modeling the airflow, temperature, static pressure and energy profile of dynamic, critical environments. Using Future Facilities’ 6SigmaDC software, we construct a virtual representation of your data center to model the impact of load distribution and the flow of hot and cold air within the facility.

The service compares and substantiates which design decisions will maximize your data center flexibility, scalability and resilience. It enables you to explore the best possible options for IT facility growth, create a calculated plan and avoid major capital commitments and costly design/implementation mistakes.

Data center cooling and aisle containment integrity services

Eaton also offers integrity testing and data center analysis to improve infrastructure performance. Our professional service group specializes in identifying airflow management issues and taking corrective actions as well as providing the information necessary to make cost-effective decisions.

Stream line plot showing temperature of air as it flows throughout the data center.

Replacement batteries for optimal performance

Battery failure is the number one cause of UPS load loss and system downtime. One bad battery can ruin an entire string of batteries and bring your systems crashing down during a power outage or interruption.

With battery performance varying greatly from one manufacturer to another, making the wrong decision can have serious consequences. That’s why Eaton offers a line of qualified premium batteries designed specifically for use with Eaton UPS models.

Eaton continuously scans the globe to ensure the highest-quality batteries are available and qualified for use. As new batteries are introduced, we apply a proven qualification process, testing them with our products to verify that they meet or exceed manufacturer specifications and supply maximum runtime.

Eaton.com/UPSbatteries

Eaton’s world-class service solutions provide improved costs, uptime and power quality to the complete catalog of Eaton hardware and software products. We let our expansive support network—240 field technicians in North America, 1,200 international authorized service providers and more than 100 dedicated customer support team members—speak for itself: we are committed to strong, lasting customer relationships.

Count on our proven performance

Our customers consistently rank our services number one in quality. In fact, they’ve rated our quality of service at 95 percent or higher since 1999. Year after year, more than 97 percent of Eaton large system service contract customers renew their contracts.

Every year Eaton spends hundreds of thousands of dollars and thousands of hours—almost one thousand hours per technician—to train field technicians. Taking it a step further, Eaton strives to reduce time to repair by providing our customer service team with the latest technologies in scheduling, call management, parts optimization and remote diagnosis.

From assisting you with determining your power quality needs and choosing a service plan to sales support and order management, we’ll stand by you every step of the way.

Enhance reliability and performance with multiple service plan options

At Eaton, we deliver service 24 hours a day, seven days a week, when and where you need it. Our services include onsite startup, corrective and preventative maintenance, battery solutions, training, remote monitoring and factory spare parts and upgrades. In addition to our UPS services, we offer extensive engineering, product management and integrated power systems solutions to deliver improved operations, cost savings and asset optimization for your facility and your business.
Service and support solutions

PredictPulse™ remote monitoring
In a perfect world, you’d have eyes on your IT infrastructure and power management equipment constantly, making sure it’s protecting critical assets and running efficiently, and replacing parts before they fail. That’s not reality, though.

Your team—however big or small—has more to tend to than just the IT environment. That’s where remote monitoring and predictive analytics can make a difference. It means a second set of eyes is keeping tabs on your equipment, notifying you of any issues and proactively replacing components during a planned maintenance window.

PredictPulse is a cloud-based monitoring and management service that collects and analyzes data from connected power infrastructure devices, providing us with the insight needed to make recommendations and take action on your behalf. Powered by CA Technologies, which brings together the best in hardware and software, this service is like doubling the size of your team.

PredictPulse Insight is the first cloud-based analytics service for data center infrastructure to predict the failure of power components. The new services adds predictive analytics to Eaton’s next-generation PredictPulse remote monitoring service, shifting power monitoring from a reactive to a proactive model.

Eaton.com/PredictPulse

Cellwatch battery monitoring
Cellwatch software continuously monitors the three-phase UPS battery system, including string and cell level voltage, internal resistance, current and temperature throughout the charge, and discharge and float periods. It also provides immediate warnings of deterioration and imminent failure of batteries and identifies any individual battery that exhibits problems—providing a proactive approach to ensuring UPS reliability.

Eaton.com/Cellwatch

Contact our dedicated team
Whether you have multiple sites or multiple vendors, Eaton is your total solutions provider. We deliver unsurpassed expertise through our service solutions and stand behind every product with 24x7 support to ensure reliable power for the most demanding applications. Contact our crisis response team day or night, 365 days a year, to speak directly with our most experienced service consultants and technical support experts.

Customer Support Center
For three-phase UPS and battery services, DC services, and software services: 1-800-843-9433.
For single-phase UPSs and technical support: 1-800-356-5737.
For power distribution services and support: 877-ETN-CARE or 877-386-2273.

Eaton’s Remote Monitoring Command Center is available 24x7 to monitor the health of your UPS.

PredictPulse dashboard

PredictPulse’s user-friendly dashboard is available as an app for both iOS and Android mobile devices.

Cellwatch provides detailed reports on battery health.
Stay connected

We’re always updating product information, sharing new validations and configurations from our alliance partners, and adding new success stories, white papers and videos. Bookmark these pages and follow our social media channels to stay in the loop.

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