Back-up and Power Protection products
Eaton ANZ support footprint

24 Hour Emergency Service Hotline
AUST 1300 303 059   NZ 0508 697 378
### 3 SERIES STANDBY UPS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>VA/Watts</th>
<th>Outlet Qty &amp; Type</th>
<th>Input</th>
<th>Cables</th>
<th>Form</th>
<th>Comms</th>
<th>Warranty</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>3S550AU</td>
<td>550/330</td>
<td></td>
<td></td>
<td>Fixed line cord</td>
<td>3 pin 10A</td>
<td>EBM Form</td>
<td>USB</td>
<td>2 years</td>
</tr>
<tr>
<td>3S700AU</td>
<td>700/420</td>
<td></td>
<td></td>
<td>Fixed line cord</td>
<td>3 pin 10A</td>
<td>Power Board</td>
<td>USB</td>
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</tr>
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</table>

### 5 SERIES LINE-INTERACTIVE UPS

<table>
<thead>
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<th>VA/Watts</th>
<th>Outlet Qty &amp; Type</th>
<th>Input</th>
<th>Cables</th>
<th>Form</th>
<th>Comms</th>
<th>Warranty</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>5E2000IUSB-AU</td>
<td>2000/1200</td>
<td>(3) AUS 3 pin 10A</td>
<td></td>
<td>Fixed line cord</td>
<td>3 pin 10A</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
</tr>
<tr>
<td>5E1500IUSB-AU</td>
<td>1500/900</td>
<td>(3) AUS 3 pin 10A</td>
<td></td>
<td>Fixed line cord</td>
<td>3 pin 10A</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
</tr>
<tr>
<td>5E1100IUSB-AU</td>
<td>1100/660</td>
<td>(3) AUS 3 pin 10A</td>
<td></td>
<td>Fixed line cord</td>
<td>3 pin 10A</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
</tr>
<tr>
<td>5E850IUSB-AU</td>
<td>850/480</td>
<td>(2) AUS 3 pin 10A</td>
<td></td>
<td>Fixed line cord</td>
<td>3 pin 10A</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
</tr>
<tr>
<td>5E650IUSB-AU</td>
<td>650/390</td>
<td>(2) AUS 3 pin 10A</td>
<td></td>
<td>Fixed line cord</td>
<td>3 pin 10A</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
</tr>
<tr>
<td>5E350IUSB-AU</td>
<td>350/210</td>
<td>(2) AUS 3 pin 10A</td>
<td></td>
<td>Fixed line cord</td>
<td>3 pin 10A</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
</tr>
</tbody>
</table>

### Extended Service Plans (ESP) Available

- **3S Series:**
  - 3S550AU: 550/330 VA/Watts
  - 3S700AU: 700/420 VA/Watts

- **5E Series:**
  - 5E1500IUSB-AU: 1500/900 VA/Watts
  - 5E1100IUSB-AU: 1100/660 VA/Watts
  - 5E850IUSB-AU: 850/480 VA/Watts
  - 5E650IUSB-AU: 650/390 VA/Watts
  - 5E350IUSB-AU: 350/210 VA/Watts

### Compatible Racks, ePDU’s, Software & Extended Service Plans (ESP) Available

- **Power Quality Products Catalogue:**
  - PW9130G6000T-XLAU: 6000/5400 VA/Watts
  - PW9130G3000T-XLAU: 3000/2600 VA/Watts
  - PW9130G1500T-XLAU: 1500/1350 VA/Watts
  - PW9130G1000T-XLAU: 1000/900 VA/Watts
  - PW9130G700T-XLAU: 700/630 VA/Watts

- **Software & Services Available:**
  - Power Manager
  - Eaton Experience Center

### From Desktop to Datacentre

- Eaton has solutions to cover any application with their 3-tiered range of UPS products to cater for every budget.

### Intelligent Power Manager

- Supervisory software lets you monitor and manage multiple power and environmental devices across the network from a single interface, giving you up-to-the-minute information on the status of power in your network.

---

**Rewards Programme**

Become an Eaton Partner and start enjoying the benefits. Sign up today by visiting:

www.powerquality.eaton.com/australia
### 9 SERIES ONLINE UPS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>VA/Watts</th>
<th>Outlet Qty &amp; Type</th>
<th>Input</th>
<th>Cables</th>
<th>EBM</th>
<th>Form</th>
<th>Comms</th>
<th>Warranty</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>9E6Ki</td>
<td>6000/4800</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9E10Ki</td>
<td>10000/8000</td>
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<td>9E10KiXL</td>
<td>10000/8000</td>
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<td>9E15Ki</td>
<td>15000/12000</td>
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<tr>
<td>9E20Ki</td>
<td>20000/16000</td>
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<td>9E20KiXL</td>
<td>20000/16000</td>
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### 9130 TOWER

<table>
<thead>
<tr>
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<th>VA/Watts</th>
<th>Outlet Qty &amp; Type</th>
<th>Input</th>
<th>Cables</th>
<th>EBM</th>
<th>Form</th>
<th>Comms</th>
<th>Warranty</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW9130G700T-XLAU</td>
<td>700/630</td>
<td>(4) AUS 3 Pin 10A</td>
<td>IEC C14 10A</td>
<td>USB</td>
<td>Yes</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
<td></td>
</tr>
<tr>
<td>PW9130G1000T-XLAU</td>
<td>1000/900</td>
<td>(4) AUS 3 Pin 10A</td>
<td>IEC C14 10A</td>
<td>USB</td>
<td>Yes</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
<td></td>
</tr>
<tr>
<td>PW9130G1500T-XLAU</td>
<td>1500/1350</td>
<td>(4) AUS 3 Pin 10A</td>
<td>IEC C14 10A</td>
<td>USB</td>
<td>Yes</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
<td></td>
</tr>
<tr>
<td>PW9130G2000T-XLAU</td>
<td>2000/1800</td>
<td>(1) IEC C13 10A</td>
<td>IEC C14 10A</td>
<td>USB</td>
<td>Yes</td>
<td>Tower</td>
<td>USB</td>
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<tr>
<td>PW9130G3000T-XLAU</td>
<td>3000/2700</td>
<td>(1) IEC C19 16A</td>
<td>IEC C14 10A</td>
<td>USB</td>
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<td>Tower</td>
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<td></td>
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<tr>
<td>PW9130G6000T-XLAU</td>
<td>6000/5400</td>
<td>(1) IEC C19 16A</td>
<td>IEC C14 10A</td>
<td>USB</td>
<td>Yes</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
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### 9PX RACK/TOWER

<table>
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<th>Comms</th>
<th>Warranty</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>9PX1000RT2UANZ</td>
<td>1000/1000</td>
<td>8 x IEC C13(10A)</td>
<td>IEC C14 10A</td>
<td>USB</td>
<td>Yes</td>
<td>Tower</td>
<td>USB</td>
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<td>9PX1500RT2UANZ</td>
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<td>8 x IEC C13(10A)</td>
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<td>Tower</td>
<td>USB</td>
<td>2 years</td>
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<tr>
<td>9PX2000RT2UANZ</td>
<td>2000/1800</td>
<td>8 x IEC C13(10A)</td>
<td>IEC C14 10A</td>
<td>USB</td>
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<td>Tower</td>
<td>USB</td>
<td>2 years</td>
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<tr>
<td>9PX2200RT3UANZ</td>
<td>2200/2200</td>
<td>8 x IEC C13(10A)</td>
<td>IEC C14 10A</td>
<td>USB</td>
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<td>Tower</td>
<td>USB</td>
<td>2 years</td>
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<tr>
<td>9PX3000RT2UANZ</td>
<td>3000/3000</td>
<td>8 x IEC C13(10A)</td>
<td>IEC C14 10A</td>
<td>USB</td>
<td>Yes</td>
<td>Tower</td>
<td>USB</td>
<td>2 years</td>
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<tr>
<td>9PX3000RT3UANZ</td>
<td>3000/3000</td>
<td>8 x IEC C13(10A)</td>
<td>IEC C14 10A</td>
<td>USB</td>
<td>Yes</td>
<td>Tower</td>
<td>USB</td>
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### 9PX

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<th>Comms</th>
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<th>Applications</th>
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<tr>
<td>9PX6KiPM + 9PXEBM240</td>
<td>8000/7200</td>
<td>HW</td>
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<tr>
<td>9PX11KiPM + 9PXEBM240</td>
<td>11000/10000</td>
<td>HW</td>
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</tr>
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</table>

**ABM® Technology**
Advanced Battery Management (ABM®) involves cyclic charging that reduces overcharging of battery and increases battery life.

**Connect**
Visit our website for comprehensive product and service support. Just look for the icons on the right hand side bar or contact your sales rep for more information.
Eaton's Power Quality solutions provide the confidence that power problems will not disrupt your systems, data and operation. Delivered through more than 50 years of solid performance, in-depth knowledge of customer applications, continuous innovations and world-class services. Eaton solutions have been recognised by UPS users and industry experts for delivering highest customer value and satisfaction, as well as for demonstrating most insight into customer needs among all UPS vendors.*

* Frost & Sullivan Award for Customer Value and Satisfaction and Frost & Sullivan Award for Product Line Strategy.

About Eaton's Solutions

Eaton offers the largest selection of power management and protection solutions available in the industry. From the desktop to the data centre, from AC-powered to DC-powered equipment, Eaton is your one-stop partner for all your power needs.

Eaton product and service range

- AC UPS from 550VA up to 3500 kVA
- DC systems of all sizes
- A broad portfolio of rack-based power distribution units (ePDU™)
- IT rack enclosures, airflow management and heat containment systems
- Software and connectivity products for power management and remote control
- Technical support and maintenance
- Complete power quality solutions

Eaton products are manufactured in factories located in Finland, USA, China, Taiwan, India, Morocco and New Zealand.
Selecting the Right UPS

Eaton’s power management solutions are based on protecting the nine most common power problems present in any environment. This unique approach makes your product selection decisions about power protection much simpler. The nine power problems listed below are potentially harmful to both your data and your hardware. Eaton’s products offer three levels of power protection:

Series 3, Series 5 and Series 9. Based on the parameters defined by your application, you can select an uninterruptible power system (UPS) from the series that best matches your power protection needs.

To provide maximum power protection, Eaton offers a full line of Series 9 UPSs with both single-phase and three-phase models in the Series 9 family.

Within each Series, Eaton has created 3 classes of products; to provide “Good, Better and Best” levels of features and performance and enable the best product fit for any application and budget.

Series 3

Standby UPS: Backup power

The Eaton’s series 3 UPS primarily protects against three of the nine power problems including power failures, power sags and power surges. This essential, cost-effective protection is necessary in order to prevent damage such as data loss, file corruption, hardware damage and equipment shutdown. For example, if your utility fails you could lose all of your work-in-progress. The Series 3 UPS offers a degree of protection against the remaining power problems and is most commonly used to protect single workstations and point-of-sale (POS) equipment.

Series 5

Line Interactive UPS: Keeping it smooth

Eaton’s series 5 UPS are most effective against five power problems (power failures, power sags, power surges, under-voltage and over-voltage) and offer a degree of protection against other power problems. Some of the damages you risk by not using a Series 5 UPS include premature hardware failure, data loss and corruption, data error, keyboard lockup, storage loss and system lockup. Series 5 UPSs are recommended for small network systems - all the way up to enterprise networking environments.

Series 9

On Line Double Conversion UPS: Total Protection

Eaton’s series 9 UPSs protect against all nine power problems: power failures, power sags, power surges, under-voltage, over-voltage, line noise, frequency variation, switching transients and harmonic distortion. Eaton’s series 9 comprehensive protection minimises the opportunity for component stress, burnt circuit boards, data crashes and program failures. Series 9 UPSs offer the highest level of power protection available and are always recommended for mission-critical applications like server farms, hospitals and Voice Over Internet Protocol (VOIP) applications.
Service

Only Eaton can offer you the support from our factory-trained and certified service technicians located near you.

Eaton Customer Service Engineers are supported by a 24x7 dispatch arrangement, convenient parts depots and a technical support team with complete knowledge of Eaton products to give you the confidence that your power protection equipment is in the best hands.

Only Eaton is authorised to perform service using Eaton diagnostic software to calibrate start-up, reset communications, and perform critical service repairs. Service contracts are your best value compared to the cost and risk of time and material. Downtime and lost data are priceless. Please do not wait until there is an emergency to realize the value of having a service contract.

Place your confidence with Eaton, a global leader with:

- A long history of technology leadership to give you the best protection
- The most complete line of hardware and software products to fit your needs
- A world-class services organisation to provide you with peace of mind

We have a range of service contract offers, that start from a basic preventative maintenance program and range to a comprehensive program including all parts and labour, these programs offer support to satisfy all your business requirements, options include business or after hours support, on-site technical response within 2 or 4 hours, supported 24 hours 7 days a week, we also offer a customer service support number and remote monitoring service to satisfy your on demand needs.

These programs can extend to 5 years and beyond so this gives you peace of mind that your initial investment will be supported in the coming months and years.

Please do not hesitate to contact your local sales representative to discuss your service requirements.
24-hour telephone support: 24-hour, 365-days-a-year access to Eaton's support engineers for immediate help on your UPS system. Available free of charge to all Service plan customers.

Battery analysis and replacement: Because batteries are the most important part of a UPS, we pay particular attention to their condition. Only rigorously tested, high-quality batteries are used in Eaton UPSs. Battery life is optimised through our ABM® battery charging method. Eaton's service engineers keep your batteries as good as new, changing them when necessary and disposing of the old batteries in an environmentally sound fashion. When the batteries are changed, all cabling is also be replaced to prevent problems through oxidation. Finally, the battery system is tested under normal operating conditions.

Commissioning: Our service engineers help you start up your UPS and make sure it works as intended, performing all necessary checks before turning the system over to you.

Extended warranty: For a small fee, you can extend the warranty of your UPSs incrementally up to 5 years, for all single phase product range.

Installation: Eaton's service engineers can help you set up and configure your entire UPS, including its connections to your monitoring system and, if desired, to remote monitoring system.

On line Remote Service: Your UPSs can link directly to Eaton's regional Service Centre via the Web. Remote monitoring software resides on Eaton's computers will keep an eye on your UPS status, sounding an alarm immediately if its monitored parameters are out of the ordinary. The remote monitoring system can only link into your UPS. It has absolutely no access to your business data. Alarms received are relayed by mobile phone to Eaton's duty engineer who takes action immediately. The remote monitoring is an ideal enhancement to your service package. Ask your Eaton representative for details.

Power quality analysis: As time goes by, the loads on both your UPS and the mains may change. Eaton's service engineers can analyse the quality of the power being fed to your equipment and suggest remedies if necessary.

Preventative maintenance: Equipment cleaning, inspection of installation and operation environment, mechanical inspection, measurements and adjustments, battery condition check, system check, event log analysis, necessary action and eventual repairs. Usually performed once a year, unless otherwise agreed.

Reports: After each maintenance visit, whether regular or emergency, you receive a full written report on the fault and steps undertaken to repair it.

Site inspections: Consultative service that aims at securing the best possible operational environment for your UPS to ensure its fault-free operation.

Spare parts: Entering an Eaton service agreement guarantees you the use of only the best quality, factory-approved spare parts. Authorised Eaton's service representatives stock the most often needed spares, and their stocks are quickly replenished from Eaton's strategically located regional logistics centres. The cost of spares is included in all Powertrust Service Plan options.

System upgrades: During maintenance visits, our service engineers analyse the load and performance of your UPS and, if necessary, suggest changes to accommodate new needs. You will never find yourself running an obsolete or undersized system.
Extended Service Plans (ESP)

Extended Warranty and Service Plans for Eaton Single Phase UPS

Eaton’s Extended Service Plans (ESP) are a suite of warranty uplift and enhanced service plans tailored to suit Eaton’s Single-Phase UPS portfolio in most deployment applications. ESP provides cost effective & hassle free extended warranty and service enhancements for Eaton’s single phase UPS products for up to 5 years from date of purchase or commissioning. Just set and forget when you purchase an ESP, as Eaton partners with YOU, simplifying the post sales support process of your critical power infrastructure. When you purchase an Eaton ESP product, a range of additional support benefits are opened up to you including:

- Warranty extension
- Advance replacement
- Streamlined logistics
- Contract customer status & priority service

Strategically designed for the most critical of IT assets, our premier level of cover (Warranty+ Premium) additionally includes start-up commissioning plus an annual preventative maintenance visit for the duration of the ESP. ESP is an ideal customer care solution in today’s ALWAYS ON business environment.

Eaton ESP overview

1. Warranty+ Standard
   - Applicable for Eaton’s single phase UPS systems up to 11kVA.
   - Available for 3rd, 4th and 5th year uplift
   - Same business day dispatch, advance replacement*
   - New unit delivered direct to the customer site nationally, Eaton covers all logistics costs.
   - Next Business Day Response onsite for hardwired single phase UPS systems 3.1kVA - 11 kVA **
   - Eaton to organise collection of the faulty unit for disposal (if required) ***
   - Access Eaton customer service centre 5x8

2. Warranty+ Premium
   - Applicable for Eaton’s hardwired single phase UPS systems 3.1kVA - 11kVA.
   - Available for 3rd, 4th and 5th year uplift
   - Same business day dispatch, advance replacement*
   - Next Business Day Response onsite **
   - Startup / Commissioning (including basic UPS functionality operator training) plus 1 x preventative maintenance visit with report per year conducted during business hours ****
   - Eaton to organise collection of the faulty unit for disposal (if required) ***
   - Access Eaton customer service centre 24 x 7

Notes:
1. * Same business day dispatch of Eaton Single Phase UPS products up to 11kVA (excludes Eaton 9155 & MX Frame UPS) with Advance Replacement and all logistics nationally.
   Softwired Eaton UPS < 3kVA is the customers responsibility to re-install.
   Hardwired Eaton UPS 3.1kVA - 11kVA (excludes Eaton 9155 & MX Frame UPS) replacement parts will be dispatched to site in advance or taken with the Service technician at the next business day onsite response **.
   The cut off time for dispatch is 3:00 p.m. AEST/AEDT, Mon-Fri.
2. ** Next Business Day response by Eaton Technician/Authorised Agent for hardwired Eaton UPS >3kVA (excludes Eaton 9155 & MX Frame UPS) to attend to fault is only applicable for locations within 100kms of Eaton Service Locations and/or Service Agents Nationwide. Additional travel charges apply for areas outside this range. Includes basic disconnect/re-connect of UPS power tails as required. Please contact your Eaton Representative for travel charges for a selected area.****
   Initial Startup and Annual PM visits to be conducted during normal business hours and scheduled accordingly upon request from the customer. Upon completion of the warranty registration, customers will receive an email notification with our service center details requesting for scheduling to be made. Customers will also be advise for PM visits to be scheduled within 8-9 months from date of installation.
5. All Eaton UPS systems must be installed and operated in accordance with manufacturers documented operating procedures. Failure to adhere to these procedures may void warranties.

6. ESP registration can be done via the Eaton website at the "register a product (warranty)" portal. Registration will be required within 30 days from date of ESP purchase. A confirmation email will be provided to the customer upon registration, for further information and scheduling details where applicable.
Superior series 3 power protection for office and home computer equipment

Eaton 3S

Protection against power problems
- The Eaton 3S UPS helps to protect your computer equipment in case of everyday events such as lightning strikes, storms, over-demand on the utility grid, accidents, and natural disasters knocking out power without warning
- In the event of a total blackout, the unit provides sufficient battery backup time to last through most power outages
- The 700VA model saves up to 30% energy through its EcoControl function which automatically disables peripherals when the master device, such as a computer, is turned off
- The 3S also protects telephone, broadband and Ethernet line from “back door” power surges
- The shutdown software makes it possible to automatically save your work and shut down your application without losing any data. Once the power is restored, you can continue working exactly where you left off

Easy integration and installation
- Attractive design and glossy finish make the 3S a perfect fit for the modern office environment
- The 3S comes with a fixed input cable and 6 Australian outlets for easy connection of typical computer configurations with peripherals
- The 3S features a HID-compliant USB port (cable supplied), for automatic integration with common operating systems (Windows/Mac OS/Linux)
- Compact unit fits on or under your desk or can be mounted on a wall
- Easy-to-replace battery helps to extend UPS service life

Ideal for protecting
- Computers and peripherals
- Broadband modems (internet and TV)
- IP telephony equipment
- POS equipment

Eaton 3S Technical specifications

<table>
<thead>
<tr>
<th>Rating (VA/W)</th>
<th>550VA / 330W</th>
<th>700VA / 420W</th>
</tr>
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<tbody>
<tr>
<td>Model numbers</td>
<td>3S550AU</td>
<td>3S700AU</td>
</tr>
<tr>
<td>Output connection</td>
<td>3 x Aust 3 Pin 10A outlets with battery backup and surge protection + 3 x Aust. 3 Pin 10A outlets with surge protection</td>
<td></td>
</tr>
</tbody>
</table>

Characteristics
- Input voltage: Up to 161-284 V (adjustable)
- Output voltage: 240 V (settable to 220 V, 230 V or 240 V)
- Frequency: 50-60 Hz autoselect
- Input protection: Resettable circuit breaker

Features
- ECO Control: No / Yes
- Line protection: Tel/fax/modem/internet/Ethernet

Battery
- Battery type: Compact, sealed lead-acid (replaceable)
- Battery test: Yes / Yes
- Cold start (no mains power): Yes / Yes
- Deep-discharge protection: Yes / Yes
- Battery replacement indicator: LED / LED
- Runtime at 50% load: 10 min / 9 min
- Runtime at 70% load: 6 min / 6 min
- Communication: Communications port HID-compliant USB port for automatic integration with most common operating systems. USB cable supplied

Standards compliance
- Safety/EMC: IEC 62040-1, IEC 60950-1, IEC 62040-2, CB Report, CE mark, C-Tick, A-Tick
- EMC: IEC 62040-2, C-Tick

Dimensions and weight
- Dimensions H x W x D: 86 x 140 x 335 mm / 86 x 170 x 335 mm
- Weight: 2.9 kg / 3.8 kg
- Warranty: 2 years
- Warranty+: Optional Warranty Uplifts

Battery run times are approximate and may vary with equipment, configuration, battery age, temperature, etc.
Essential series 5 Power Protection

Eaton 5E

The 5E line interactive uninterruptible power system (UPS) provides affordable power protection for your personal computers, home, office and other electronic devices. While packed with valuable features such as ANZ power receptacles and USB communications, the compact size is ideal for limited office and home working spaces.

Features
- Automatic Voltage Regulation (AVR) stabilises fluctuating power sources
- Microprocessor control design ensures high reliability
- Up to three ANZ receptacles, allowing easy equipment connection
- Eaton UPS Companion software monitors power conditions and gracefully shuts down computer applications prior to battery depletion
- User replaceable batteries allow easy maintenance
- Start-on-battery provides portable power capability

Technology: Series 5 (Line Interactive)
Rating: 650 / 850 / 1100 / 1500 / 2000VA
Voltage: 230V
Backup Time: Typical 5 min
Configuration: Tower

Essential series 5 Power Protection

5E Series Technical Specifications

<table>
<thead>
<tr>
<th>Technology</th>
<th>Line Interactive (Automatic Voltage Regulation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating, VA/Watts</td>
<td>650VA / 360W 850VA / 480W 1100VA / 660W 1500VA / 900W 2000VA / 1200W</td>
</tr>
<tr>
<td>Model Numbers</td>
<td>5E650iUSB-AU 5E850iUSB-AU 5E1100iUSB-AU 5E1500iUSB-AU 5E2000iUSB-AU</td>
</tr>
</tbody>
</table>

Characteristics - input/output

- Input Voltage Window: 170-280 Volts
- Output Voltage on Battery: 230V
- Frequency: 50/60Hz, auto detection
- Output receptacles: 2 x ANZ 3 pin 10A sockets 3 x ANZ 3 pin 10A sockets
- Input Connection: Fixed 1.5M 10A ANZ 3 pin input cord included

Battery run time (minutes)

- Typical backup times for 1 PC*: 16 20 45 50 50
- Typical backup times for 2 PC*: 6 8 20 26 26
- Typical backup times for 3 PC*: - - 7 10 10
- Typical backup times for 4 PC*: - - - - 5

Start-On-Battery: Unit can be started without being connected to AC utility power, battery recharged is maintained even when UPS is off, whilst connected to mains.

User Interface

- Visual: 1 On / Off Green LED button, AC mode = Steady on, Battery mode = flashing
- Audible: Five audible alarms indicate operating modes; refer user manual

Communications / management

- Power Management Software: Eaton UPS Companion power management software, downloadable via internet
- Connection Type: 1 x USB port to front panel
- Approvals: CE Marking, C-Tick

Dimensions and weights

<table>
<thead>
<tr>
<th>Dimensions (H x W x D)</th>
<th>148 x 100 x 288 mm 180 x 133 x 330 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>4.6 kg 5.1 kg 9.3 kg 10.5 kg 10.5 kg</td>
</tr>
<tr>
<td>Warranty</td>
<td>2 years</td>
</tr>
<tr>
<td>Warranty+</td>
<td>Optional warranty uplifts</td>
</tr>
</tbody>
</table>

*Battery run times are approximate and may vary with equipment, configuration, battery age, temperature, etc.
Superior series 5 power protection for office servers

**Eaton 5S**

The Eaton 5S UPS provides effective power protection, even in disturbed electrical environments. Voltage fluctuations are automatically corrected using an AVR device (booster/fader), without needing the batteries.

The 5S not only provides a supply with battery backup to keep equipment operating during power cuts, but also provides effective protection against damaging surges. The 5S protects networked equipment from ‘back door’ power surges coming through Ethernet, internet or telephone lines. The 5S’s periodic automatic battery testing ensures early detection if a battery needs to be replaced. The easy-to-replace battery helps to extend the UPS service life.

The 5S can be installed vertically over or under a desk, or horizontally under a screen. Its compact, slimline form factor even allows it to be easily integrated into environments with space constraints. The 5S features an HID-compliant USB port, for automatic integration with common operating systems (Windows/ Mac OS/Linux). The 5S is also compatible with Eaton UPS Companion power management software. All models come bundled with a USB cable for PC connection.

Reduce wasted energy consumption from standby power drain of connected peripheral equipment with ECO Control function (850-1600VA models)

### Eaton 5S Technical Specifications

<table>
<thead>
<tr>
<th>Rating (VA/W)</th>
<th>550VA/330W</th>
<th>700VA/420W</th>
<th>850VA/510W</th>
<th>1200VA/750W</th>
<th>1600VA/1000W</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical Characteristics</strong></td>
<td>Technology</td>
<td>Line-Interactive (AVR with Booster + Fader)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Input voltage range</td>
<td>175V-275V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Output voltage</td>
<td>240 V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>50-60 Hz autoselect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Connections</strong></td>
<td>Number of AUS outlets</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outlets with surge protection and battery backup / Outlets with surge protection only</td>
<td>3 / 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batteries</strong></td>
<td>Typical backup times at 50 and 70% load*</td>
<td>10/6 min</td>
<td>9/5 min</td>
<td>9/5 min</td>
<td>9/5 min</td>
</tr>
<tr>
<td></td>
<td>Battery management</td>
<td>Automatic battery test, deep-discharge protection, cold-start capable, replaceable batteries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>User Interface</td>
<td>LED</td>
<td>LCD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication Port</td>
<td>HID-compliant USB port for automatic integration with most common operating systems (Windows Vista, 7 &amp; 8, Linux, Mac OS X), cable supplied</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data line protection</td>
<td>Tel/Fax/Modem/Internet and Ethernet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Standards</strong></td>
<td>Safety &amp; EMC</td>
<td>IEC/EN 62040-1, IEC/EN 62040 -2, CB Report, CE mark C-Tick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions and Weight</strong></td>
<td>Dimensions H x W x D</td>
<td>250 x 87 x 260 mm</td>
<td>250 x 87 x 382 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weight</td>
<td>4.96kg</td>
<td>5.98kg</td>
<td>6.50kg</td>
<td>9.48kg</td>
</tr>
<tr>
<td><strong>Customer Service and Support</strong></td>
<td>Warranty</td>
<td>2 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Part Numbers</strong></td>
<td>550</td>
<td>700</td>
<td>850</td>
<td>1200</td>
<td>1600</td>
</tr>
<tr>
<td></td>
<td>5S</td>
<td>5S550AU</td>
<td>5S700AU</td>
<td>5S850AU</td>
<td>5S1200AU</td>
</tr>
</tbody>
</table>

Battery run times are approximate and may vary with equipment, configuration, battery age, temperature, etc.

**Ideal for protecting**

- Workstations
- Business Telephony
- Network devices
- Point-of-sale equipment
Premier high density series 5 protection for network devices

Eaton 5P

Manageability
The graphical LCD display provides clear information on the UPSs status and measurements on a single screen (in seven languages). Enhanced configuration capabilities are also available with easy-to-use navigation keys.

Meters energy consumption and provides kWh values through the LCD and Intelligent Power® Software. Load segment control enables prioritised shutdowns of nonessential equipment to maximise battery runtime for critical devices. Load segment control can also be used to remotely reboot locked-up network equipment or to manage scheduled shutdowns and sequential start-ups.

The 5P offers Serial and USB connectivity, plus an extra slot for an optional communication card (including SNMP/Web card or relay contact card). Eaton’s Intelligent Power® Software Suite compatible with all major OS including virtualization software such as VMware and Hyper-V is included with each UPS.

Availability and Flexibility
5P is available as a tower or rack form factor to cater for varied deployment applications. Stronger, longer battery life: Eaton ABM® battery management technology uses an innovative three-stage charging technique that only recharges the battery when necessary, so the battery experiences less corrosion and service life is prolonged by up to 50%.

Batteries can be hot-swapped without ever having to shut down connected equipment. With an optional, hot-swap maintenance bypass module, you can even replace the entire UPS.

Performance and Efficiency
With an optimised electrical design, the 5P can provide up to 98% efficiency, contributing to lower cooling and utility costs. When operating in battery mode the 5P provides a high quality output signal for any sensitive equipment connected, such as active PFC (power factor corrected) servers.

Advanced protection for:
- Servers
- Switches
- Routers
- Storage devices

Technology: Series 5 (Line Interactive)
Rating: 650-1550VA
Voltage: 230 Vac
Backup time: 5-10 minutes
Configuration: Rack and Tower mount
### Eaton 5P Technical Specifications

<table>
<thead>
<tr>
<th>Rating (VA/W)</th>
<th>650VA / 420W</th>
<th>850VA / 600W</th>
<th>1150VA / 770W</th>
<th>1550VA / 1100W</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Format</strong></td>
<td>Tower or 1U Rack</td>
<td>Tower or 1U Rack</td>
<td>Tower or 1U Rack</td>
<td>Tower or 1U Rack</td>
</tr>
<tr>
<td><strong>Electrical characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>Line-Interactive High Frequency (Pure Sinewave, Booster + Fader)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Input voltage and frequency without using batteries</strong></td>
<td>160V-294V (adjustable to 150V-294V) 47 to 70 Hz (50 Hz system), 56.5 to 70 Hz (60 Hz system), 40 Hz in low-sensitivity mode</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Output voltage and frequency</strong></td>
<td>230 V (+6/-10 %) (Adjustable to 200V / 208V / 220V / 230V / 240V), 50/60 Hz +/- 0.1 % (autosensing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Connections</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outputs</strong></td>
<td>Tower: 2 x AU 10A, 3 x IEC C13 (10A) Rack: 4 x IEC C13 (10A)</td>
<td>Tower: 2 x AU 10A, 3 x IEC C13 (10A) Rack: 6 x IEC C13 (10A)</td>
<td>Tower: 2 x AU 10A, 3 x IEC C13 (10A) Rack: 6 x IEC C13 (10A)</td>
<td>Tower: 2 x AU 10A, 3 x IEC C13 (10A) Rack: 6 x IEC C13 (10A)</td>
</tr>
<tr>
<td><strong>Remotely controlled sockets</strong></td>
<td>Tower: 2 x 10A AU individually switched</td>
<td>Tower: 2 x 10A AU individually switched</td>
<td>Tower: 2 x 10A AU individually switched</td>
<td>Tower: 2 x 10A AU individually switched</td>
</tr>
<tr>
<td><strong>Batteries</strong></td>
<td><em>Typical backup times for 50 and 70% load</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5P</td>
<td>9/5.5 mins</td>
<td>12/7.5 mins</td>
<td>12/7.5 mins</td>
<td>13/8.5 mins</td>
</tr>
<tr>
<td><strong>Battery management</strong></td>
<td>ABM &amp; Temperature compensated charging method (user selectable), Automatic battery test, deep discharge protection, to automatic recognition of external battery units.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interfaces</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication ports</strong></td>
<td>1 USB port + 1 RS232 serial port and relay contacts (USB and RS232 ports cannot be used simultaneously) + 1 mini terminal block for remote ON/OFF or Remote Power Off</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communications card slots</strong></td>
<td>1 slot for NETWORK-MS, MODBUS-MS or RELAY-MS cards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating conditions, standards and approvals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>Models 650, 850 &amp; 1550 = 0ºC to +35ºC, Model 1550 = 0ºC to +40ºC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Noise Level</strong></td>
<td>&lt; 40dBA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Performance - Safety - EMC</strong></td>
<td>IEC/EN 62040-1-1 (Safety), IEC/EN 62040-2 (EMC), IEC/EN 62040-3 (Performance), C-Tick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Approvals</strong></td>
<td>CE, CB Report(TUV), C-Tick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions W x D x H / Weight</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPS Dimensions (mm) &amp; weight (kg)-Tower</td>
<td>150 x 345 x 230mm / 7.8kg</td>
<td>150 x 345 x 230mm / 10.4kg</td>
<td>150 x 345 x 230mm / 11.1kg</td>
<td>150 x 445 x 230mm / 15.6kg</td>
</tr>
<tr>
<td>UPS Dimensions (mm) &amp; weight (kg)-Rack</td>
<td>438 x 364 x 43.2mm(1RU) / 8.6kg</td>
<td>438 x 509 x 43.2mm(1RU) / 13.8kg</td>
<td>438 x 609 x 43.2mm(1RU) / 14.6kg</td>
<td>438 x 554 x 43.2mm(1RU) / 19.4kg</td>
</tr>
<tr>
<td><strong>Customer Service &amp; Support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warranty</td>
<td>3 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Part Numbers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5P Tower</td>
<td>5P650AU</td>
<td>5P850AU</td>
<td>5P1150AU</td>
<td>5P1550AU</td>
</tr>
<tr>
<td>5P Rack</td>
<td>5P650R</td>
<td>5P850R</td>
<td>5P1150R</td>
<td>5P1550R</td>
</tr>
</tbody>
</table>

* Runtimes are shown at 0.7 power factor. Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc.
Affordable protection for networking systems, emergency lighting and electrical infrastructure.

Eaton 5SX UPS

Manageability
- The LCD interface provides clear status of the UPS key parameters such as input and output voltage, load and battery level, and estimated runtime. Essential configuration capabilities are also offered for output voltage, audible alarm and sensitivity.
- The 5SX offers USB and serial connectivity. USB port is HID compliant for automatic integration into Windows, Mac OS and Linux.
- A slot for an optional communication card (including SNMP/Web card or relay contact card) is available. Eaton’s Intelligent Power® Software Suite insures compatibility with all major OS including virtualization software.

Flexibility
- R/T models authorizes either tower or rack installation - pedestals are included, rail kits are an optional extra.
- Easy battery replacement from front panel to extend UPS life.
- Up to 4 EBM’s can be added for longer runtimes

Reliability
- Pure sinewave output: When operating in battery mode the 5SX provides a high quality output signal for any sensitive equipment connected.
- Buck and Boost operation corrects a wide range of input voltage variations through continuous regulation, without the use of batteries.
- Stronger, longer battery life: Eaton ABM® battery management technology uses an innovative three-stage charging system that extends battery life by up to 50%.

Ideal for protecting
- NAS, Network equipment
- ATMs, Ticket machines, Kiosks
### Eaton 5SX Technical Specifications

<table>
<thead>
<tr>
<th>Technical Specifications</th>
<th>5SX1250AU</th>
<th>5SX1750AU</th>
<th>5SX3000AU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating (VA/W)</td>
<td>1250VA/1125W</td>
<td>1750VA/1575W</td>
<td>3000VA/2700W</td>
</tr>
<tr>
<td>Format</td>
<td>Tower selectable, Rack (5SXRACKKIT2U)</td>
<td>Tower selectable, Rack (5SXRACKKIT2U)</td>
<td>Tower selectable, Rack (5SXRACKKIT2U)</td>
</tr>
<tr>
<td><strong>Electrical Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology/output</td>
<td>Line interactive, pure sine wave output</td>
<td>Line interactive, pure sine wave output</td>
<td>Line interactive, pure sine wave output</td>
</tr>
<tr>
<td>Input voltage ranges without using batteries</td>
<td>160V - 290V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output voltage</td>
<td>240V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output Frequency</td>
<td>Auto sensing, 50Hz default</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Connections</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>IEC C14-AU 10A</td>
<td>IEC C14-AU 10A</td>
<td>IEC C20-AU 16A</td>
</tr>
<tr>
<td>Outputs</td>
<td>8*IEC C13 outlets</td>
<td>8*IEC C13 outlets</td>
<td>8<em>IEC C13 outlets + 1</em>IEC C19 outlets</td>
</tr>
<tr>
<td><strong>Batteries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBM</td>
<td>5SXEBM48R2U</td>
<td>5SXEBM48R2U</td>
<td>5SXEBM72R2U</td>
</tr>
<tr>
<td>1UPS</td>
<td>5min</td>
<td>3.7min</td>
<td>2.4min</td>
</tr>
<tr>
<td>1UPS+1EBM</td>
<td>23min</td>
<td>19.4min</td>
<td>16.8min</td>
</tr>
<tr>
<td>1UPS+2EBM</td>
<td>47min</td>
<td>35min</td>
<td>33.7min</td>
</tr>
<tr>
<td>Battery management</td>
<td>ABM</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Ports</td>
<td>1 USB port +1 RS232 + 1 communication slot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connectivity cards</td>
<td>NETWORK-MS, Relay card</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>IPSS</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating conditions, standards and approvals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0-40°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noise level</td>
<td>&lt;40db</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulations</td>
<td>EN62040-2, EN61000-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions D x H x W / Weight</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (mm)</td>
<td>522<em>441.2</em>86.2(2U)</td>
<td>647<em>441.2</em>86.2(2U)</td>
<td></td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>25.4</td>
<td>26.6</td>
<td>35.3</td>
</tr>
</tbody>
</table>

* Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc.

** Based on 100% load
The Eaton 5PX provides exceptional efficiency, manageability and metering capabilities for IT managers

**Manageability**
- The new graphical LCD display provides clear information on the UPS’s status and measurements on a single screen (in seven languages). Enhanced configuration capabilities are also available with easy-to-use navigation keys
- For the first time in the industry the 5PX can meter energy consumption right down to the managed outlet groups. kWh values can be monitored using the LCD or Eaton’s Intelligent Power® Software Suite
- Load segment control enables prioritised shutdowns of nonessential equipment to maximise battery runtime for critical devices. Load segment control can also be used to remotely reboot locked-up network equipment or to manage scheduled shutdowns and sequential start-ups
- The 5PX offers Serial and USB connectivity, plus an extra Mini Slot for an optional communication card (including SNMP/Web card or relay contact card). Eaton’s Intelligent Power® Software Suite compatible with all major OS including virtualisation software such as VMware and Hyper-V is included with each UPS

**Availability and Flexibility**
- The 5PX comes in a rack/tower convertible cabinet - pedestal and rail kits are included with all models at no extra charge
- Stronger, longer battery life: Eaton ABM® battery management technology uses an innovative three-stage charging technique that only recharges the battery when necessary, so the battery experiences less corrosion and service life is prolonged by up to 50%
- Batteries can be hot-swapped without ever having to shut down connected equipment. With an optional, hot-swap maintenance bypass module, you can even replace the entire UPS
- There is also the possibility to add more runtime with up to four external hot-swappable battery modules, able to run systems for hours if necessary. The additional battery modules are automatically recognised by the UPS

**Performance and Efficiency**
- With an optimised electrical design, the 5PX can provide up to 99% efficiency, reducing cooling and utility costs
- With a power factor of 0.9, the 5PX delivers more real output power. It powers more servers than other UPSs with equivalent VA ratings and lower power factors. The 5PX is compatible with all modern IT equipment
- When operating in battery mode the 5PX provides a high quality output waveform for any sensitive equipment connected, such as active PFC (power factor corrected) servers

**Ideal for protecting**
- Servers
- Switches
- Routers
- Storage devices
Eaton 5PX

### Eaton 5PX Technical Specifications

<table>
<thead>
<tr>
<th></th>
<th>1500</th>
<th>2000</th>
<th>2200</th>
<th>3000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>RT2U (rack / tower 2U)</td>
<td>RT2U (rack / tower 2U)</td>
<td>RT2U (rack / tower 2U)</td>
<td>RT2U &amp; RT3U</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>Line-Interactive High Frequency (Pure Sinewave, Booster + Fader)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input voltage and frequency ranges</td>
<td>160V-294V (adjustable to 150V-294V) 47 to 70 Hz (50 Hz system), without using batteries 56.5 to 70 Hz (60 Hz system), 40 Hz in low-sensitivity mode</td>
<td>230 V (+6/-10 %) (Adjustable to 200V / 208V / 220V / 230V / 240V), 50/60 Hz +/- 0.1 % (autosensing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output voltage and frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Connections

<table>
<thead>
<tr>
<th>Input</th>
<th>1 IEC C14 (10 A) socket</th>
<th>1 IEC C14 (10 A) socket</th>
<th>1 IEC C20 (16 A) socket</th>
<th>1 IEC C20 (16 A) socket</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outputs</td>
<td>8 IEC C13 (10 A) sockets</td>
<td>8 IEC C13 (10 A) sockets</td>
<td>8 IEC C13 (10 A) sockets, 1 IEC C19 (16 A) socket</td>
<td>8 IEC C13 (10 A) sockets, 1 IEC C19 (16 A) socket</td>
</tr>
<tr>
<td>Remotely controlled sockets</td>
<td>2 groups of 2 x IEC C13 (10 A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional outputs with Hot Swap MBP</td>
<td>4 AUS 10A + 1 IEC 16A sockets or 6 IEC 10 A sockets or terminal blocks (HW version)</td>
<td>6 AUS 10A + 1 IEC 16A sockets or 12 IEC 10 A sockets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Batteries - Typical backup times for 50 and 70% load*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5PX</td>
<td>19/11 mins</td>
<td>16/8 mins</td>
<td>15/8 mins</td>
<td>14/9 mins</td>
</tr>
<tr>
<td>5PX + 1 EBM</td>
<td>90/54 mins</td>
<td>66/39 mins</td>
<td>60/35 mins</td>
<td>66/38 mins</td>
</tr>
<tr>
<td>5PX + 4 EBM</td>
<td>285/180 mins</td>
<td>231/138 mins</td>
<td>210/125 mins</td>
<td>213/131 mins</td>
</tr>
<tr>
<td>Battery management</td>
<td>ABM® &amp; Temperature compensated charging method (user selectable), Automatic battery test, deep discharge protection, automatic recognition of external battery units</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Interfaces

<table>
<thead>
<tr>
<th>Communication ports</th>
<th>1 USB port + 1 RS232 serial port and relay contacts (USB and RS232 ports cannot be used simultaneously) + 1 mini terminal block for remote ON/OFF and Remote Power Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications card slots</td>
<td>1 Mini Slot for Network Card-MS, Relay Card-MS and Network &amp; Modbus Card-MS connectivity cards</td>
</tr>
</tbody>
</table>

### Operating conditions, standards and approvals

<table>
<thead>
<tr>
<th>Operating temperature</th>
<th>0 to 40°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise Level</td>
<td>&lt; 45 dBA</td>
</tr>
<tr>
<td>Performance - Safety - EMC</td>
<td>IEC/EN 62040-1-1 (Safety), IEC/EN 62040-2 (EMC), IEC/EN 62040-3 (Performance), C-Tick</td>
</tr>
<tr>
<td>Approvals</td>
<td>CE, CB report, TÜV</td>
</tr>
</tbody>
</table>

### Dimensions W x D x H / Weight

<table>
<thead>
<tr>
<th>UPS Dimensions (mm)</th>
<th>441 x 522 x 86.2 (2U)</th>
<th>441 x 522 x 86.2 (2U)</th>
<th>441 x 522 x 86.2 (2U)</th>
<th>441 x 497 x 130.7 (RT3U)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS Weight (kg)</td>
<td>27.6 kg</td>
<td>28.5 kg</td>
<td>28.5 kg</td>
<td>38.08 kg (RT2U), 37.33 kg (RT3U)</td>
</tr>
<tr>
<td>Dimensions of EBM</td>
<td>same as UPS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight of the EBM</td>
<td>32.8 kg</td>
<td>32.8 kg</td>
<td>32.8 kg</td>
<td>46.4 kg (RT2U), 44.4 kg (RT3U)</td>
</tr>
</tbody>
</table>

### Customer Service & Support

| Warranty | 3 years |

* Runtimes are shown at 0.7 power factor. Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc.

### Part Numbers

<table>
<thead>
<tr>
<th></th>
<th>1500</th>
<th>2000</th>
<th>2200</th>
<th>3000 (RT3U)</th>
<th>3000 (RT2U)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS</td>
<td>5PX1500iRT</td>
<td>5PX2000iRT</td>
<td>5PX2200RT2UAU</td>
<td>5PX3000iRT3UAU</td>
<td>5PX3000iRT2UAU</td>
</tr>
<tr>
<td>EBM</td>
<td>5PXEBM48RT</td>
<td>5PXEBM48RT</td>
<td>5PXEBM48RT</td>
<td>5PXEBM72RT3U</td>
<td>5PXEBM72RT2U</td>
</tr>
</tbody>
</table>
Premier series 9 Tower UPS for all critical applications

Eaton 9130 Tower

The Eaton 9130 UPS, resolves utility power problems and delivers superior power protection for IT and networking equipment, medical systems, manufacturing process control — or anywhere critical equipment and applications require clean, continuous power.

Typical applications:
- Servers, networking gear
- Telecommunications, VoIP security systems
- Medical systems
- Diagnostics and medical screening
- Patient record archives
- Manufacturing systems
- Chip fabrication
- Pharmaceutical production
- Chemical processing

Product highlights:
- Offers premium performance with a 0.9 power factor and 95% efficiency
- Increases battery service life and system uptime with ABM® battery charging technology
- Enables prolonged runtime of essential equipment during power outages by allowing for orderly, remote shutdown of non-critical systems or processes
- Ensures data and system integrity with Intelligent Power® management software

Options:
- Extended Battery Modules for extended run time and Extended Battery Cabinets for even longer run time
- External Battery Charger Unit for fast charging of long run time Extended Battery Cabinets
- Hard wiring kits for fixed installations
- Interlocked Maintenance Bypass Switches
- Mini Slot connectivity cards
- Extended warranty plans

Technology: Series 9, (Double Conversion On Line)
Rating: 700 - 6000VA
Voltage: 208–240Vac
Configuration: Tower

Double-conversion design for superior power protection
The 9130 is constantly monitoring power conditions—regulating both voltage and frequency. Even when presented with the most severe power problems, this UPS’s output remains within two percent of nominal voltage. With a wide input voltage range, the 9130 does not depend on batteries to smooth out minor power fluctuations. Batteries are conserved for those times when utility power is highly unstable or completely out. If an outage occurs, the 9130 transfers to battery with zero interruption in power, making this an ideal UPS for sensitive and critical equipment.

More real power for less cost.
High 0.9 output power factor enables the 9130 to provide its full power capability to modern IT equipment that may have a wide range of leading and lagging power factors. With a 0.99 input power factor, this UPS avoids the disturbances that some energy converters tend to cause.
### Eaton 9130 Tower Technical Specifications

<table>
<thead>
<tr>
<th>Rating</th>
<th>700VA</th>
<th>1000VA</th>
<th>1500VA</th>
<th>2000VA</th>
<th>3000VA</th>
<th>6000VA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (VA/Watts)</td>
<td>700/630</td>
<td>1000/900</td>
<td>1500/1350</td>
<td>2000/1800</td>
<td>3000/2700</td>
<td>6000/5400</td>
</tr>
<tr>
<td>Dimensions WxDxH (mm)</td>
<td>160x35x250</td>
<td>160x383x250</td>
<td>160x435x250</td>
<td>214x410x345</td>
<td>214x410x345</td>
<td>242x542x575</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>12.2</td>
<td>14.5</td>
<td>19.0</td>
<td>34.5</td>
<td>34.5</td>
<td>75.5</td>
</tr>
<tr>
<td>Input connection</td>
<td>IEC C14-10A</td>
<td>IEC C14-10A</td>
<td>IEC C14-10A</td>
<td>IEC C14-10A</td>
<td>IEC C20-16A</td>
<td>Hard Wired</td>
</tr>
<tr>
<td>Output connection</td>
<td>(4) AUST 10A</td>
<td>(4) AUST 10A</td>
<td>(4) AUST 10A</td>
<td>(1) IEC C13-10A</td>
<td>(5) AUST 10A</td>
<td>(1) IEC C19-16A</td>
</tr>
</tbody>
</table>

#### Operational

- **Nominal input voltage (Vac):** 240Vac (200/208/220/230 selectable)
- **Input voltage range:**
  - 700-1500VA: 120/140/160-276 Vac (at 33%/66%/100% 0.7pf load)
  - 2000-3000VA: 140/160/180-276 Vac (at 33%/66%/100% 0.7pf load)
  - 6000VA: 120/140/160/180-276V (25%/50%/75%/100% 0.9pf Load)
- **Operating frequency:** 50/60 Hz auto sensing, tolerance 40-70Hz
- **Input power factor:** 0.99
- **Nominal output voltage:** 240Vac (200/208/220/230 selectable)
- **Output voltage regulation:** +/-2%
- **Overload capacity:**
  - 700-3000VA: Up to 130 % for 12 seconds, 130-150% for 2 sec
  - 6000VA: Up to 130 % for 120 seconds, 130-150% for 30 sec
- **Efficiency:**
  - 700-2000VA: 90% online, 93% High Efficiency Mode
  - 3000VA: 91% online, 93% High Efficiency Mode
  - 6000VA: 95% online, 98% High Efficiency Mode

#### User interface

- **LCD display:** LCD display showing both UPS meters and UPS settings
- **LED:** Four LEDs; UPS On, UPS on Battery, UPS on bypass, Alarm
- **Standard communication ports:** RS232 and USB as standard on all models
- **Optional:** 1 Mini Slot for Network Card-MS, Relay Card-MS or Network & Modbus Card-MS connectivity cards

#### Environmental

- **Operating temperature:** 0ºC - +40ºC
- **Storage temperature:** -15ºC - +40ºC
- **Altitude:** < 3000 m
- **Audible noise at 1 metre:** 700-3000VA: < 52 dBA, 6000VA: < 55 dBA

#### Certification

- **Markings:** C-Tick, CE, GS
- **EMC:** EN62040-2 Emissions, category C1; Immunity, category C2

### Battery Runtimes (in minutes) Standard Extended Battery Modules

<table>
<thead>
<tr>
<th>Load (VA/Watts)</th>
<th>% of Load</th>
<th>Internal Batteries</th>
<th>w/1 EBM</th>
<th>w/2 EBM</th>
<th>w/3 EBM</th>
<th>w/4 EBM</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW9130G700T</td>
<td>100%</td>
<td>5</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>700/630</td>
<td>50%</td>
<td>14</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>350/315</td>
<td>100%</td>
<td>6</td>
<td>31</td>
<td>51</td>
<td>82</td>
<td>100</td>
</tr>
<tr>
<td>1000/900</td>
<td>50%</td>
<td>19</td>
<td>68</td>
<td>111</td>
<td>192</td>
<td>246</td>
</tr>
<tr>
<td>500/450</td>
<td>100%</td>
<td>5</td>
<td>24</td>
<td>46</td>
<td>69</td>
<td>90</td>
</tr>
<tr>
<td>1500/1350</td>
<td>50%</td>
<td>14</td>
<td>61</td>
<td>112</td>
<td>172</td>
<td>221</td>
</tr>
<tr>
<td>750/675</td>
<td>100%</td>
<td>11</td>
<td>44</td>
<td>79</td>
<td>115</td>
<td>162</td>
</tr>
<tr>
<td>PW9130G2000T-XLAU</td>
<td>50%</td>
<td>28</td>
<td>96</td>
<td>168</td>
<td>258</td>
<td>336</td>
</tr>
<tr>
<td>2000/1800</td>
<td>100%</td>
<td>15</td>
<td>60</td>
<td>100</td>
<td>169</td>
<td>215</td>
</tr>
<tr>
<td>1000/900</td>
<td>50%</td>
<td>6</td>
<td>21</td>
<td>51</td>
<td>66</td>
<td>93</td>
</tr>
<tr>
<td>1500/1350</td>
<td>100%</td>
<td>15</td>
<td>60</td>
<td>100</td>
<td>169</td>
<td>215</td>
</tr>
<tr>
<td>3000/2700</td>
<td>50%</td>
<td>19</td>
<td>78</td>
<td>148</td>
<td>211</td>
<td>266</td>
</tr>
</tbody>
</table>

Run time chart provides typical information. Battery runtimes are approximate and may vary with equipment, configuration, battery age, temperature, etc. Longer run times available with Extended Battery Cabinets. Please consult your sales representative for information.
Advanced protection for critical networks

Eaton 9PX UPS - 2kVA/1800W

Performance and Efficiency
- 9PX 2kVA UPS is designed to provide 0.9 power factor powering more servers with equivalent VA ratings and lower power factors.
- Energy Star qualified, the 9PX provides the highest efficiency level to reduce energy and cooling costs.
- Double conversion topology. The Eaton 9PX constantly monitors power conditions and regulates voltage and frequency.
- With a versatile Rack/Tower form factor.

Availability and Flexibility
- 9PX 2000 is available in RT2U format (optimised for rack mounting), pedestal and rail kits are included with all models.
- The internal bypass allows service continuity in case of internal fault, for easy replacement of the UPS.
- Stronger, longer battery life: Eaton ABM® battery management technology uses an innovative three-stage charging technique that extends battery life by up to 50%.
- More runtime can be added with up to 4 external hot-swappable battery modules, able to run systems for hours if necessary.

Manageability
- The graphical LCD display provides clear information on the UPS’s status and measurements on a single screen. Enhanced configuration capabilities are also available.
- 9PX can meter energy consumption right down to the managed outlet groups. kWh values can be monitored using the LCD or Eaton’s Intelligent Power® Software.
- Load segment control enables prioritised shutdown of non-essential equipment to maximize battery runtime for critical devices.
- 9PX offers Serial and USB connectivity, plus an extra slot for an optional communication card. Eaton’s Intelligent Power® Software seamlessly integrates with leading virtualisation environments and cloud orchestrations tools.
## Eaton 9PX UPS - 2kVA/1800W

### Technical Specifications

<table>
<thead>
<tr>
<th>2000VA</th>
<th>9PX 2000</th>
<th>9PX 2000 + 1 EBM</th>
<th>9PX 2000 + 4 EBM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating (VA/W)</td>
<td>2000VA/1800W</td>
<td>114</td>
<td>453</td>
</tr>
<tr>
<td>Format</td>
<td>RT2U (tower/rack 2U)</td>
<td>65</td>
<td>261</td>
</tr>
</tbody>
</table>

### Electrical Characteristics

- **Technology**: On-line double conversion with Power Factor Correction (PFC) system
- **Nominal voltage**: 200/208/220/230/240V
- **Input voltage range**: 176-276V without derating (up to 100-276V with derating)
- **Input frequency range**: 40-70Hz, 50/60Hz auto-selection, frequency converter mode
- **Efficiency**: up to 93% in online mode (up to 98% in Hi-efficiency mode)

### Connections

- **Input**: (1) IEC C14 (10A)
- **Outputs**: (4) IEC 13 (10A) + (2) AUS GPO (10A)
- **Switched Outlet Group**: 2 outlet groups
- **Switched Outlet**: (2) IEC C13 (10A) + (2) AUS GPO (10A)

### Batteries

- **Battery management**: ABM® & Temperature compensated charging method (user selectable), Automatic battery test, deep discharge protection, automatic recognition of external battery units

### Communication

- **Communication ports**: 1 USB port + 1 serial RS232 port + 1 mini-terminal block for remote ON/OFF + 1 mini-terminal block for Output relay
- **Communication slot**: 1 slot for Network-MS card, ModBus-MS or Relay-MS cards

### Operating conditions, standards and approvals

- **Operating temperature**: 0 to 40°C
- **Typical Noise level**: 40dB
- **Safety**: IEC/EN 62040-1, UL 1778, CSA 22.2
- **EMC**: IEC/EN 62040 -2 , FCC Class B, CISPR22 Class B
- **Approvals & Markings**: CE /CB report (TUV) / cULus / EAC / RCM / KC / Energy Star

### Dimensions H x W x D in mm/Weight

- **UPS**: 2U version: 86,5*440*605/27.4kg
- **EBM**: 2U version: 86,5*440*605/39.2kg

### Customer Service and Support

- **Warranty**: 3 years

*Backup times are approximate and may vary with equipment, configuration, battery age, temperature etc.*

### Parts Number

- **9PX 2000VA**: UPS RT2U
- **9PX2000RTAU**: EBM
- **EBMCBL72**: Battery Integration System

*All 9PX UPS and EBM are delivered with rack kit*
Eaton 9PX UPS 1-3 kVA

Performance and Efficiency
• 9PX is the first UPS in its class to provide Unity power factor (VA=W). It delivers 11% more power than any other UPS as well as powering more servers with equivalent VA ratings and lower power factors.
• Energy Star qualified, the 9PX provides the highest efficiency level to reduce energy and cooling costs.
• Double conversion topology. The Eaton 9PX constantly monitors power conditions and regulates voltage and frequency.
• With a versatile Rack/Tower form factor, the 9PX is the most compact solution delivering up to 3000W in only 2U.

Availability and Flexibility
• 9PX 2200 & 3000 are available in RT2U format (optimised for rack mounting) or RT3U (for tower or short-depth racks), pedestal and rail kits are included with all models.
• The internal bypass allows service continuity in case of internal fault, a maintenance bypass is also available (as standard on HotSwap version) for easy replacement of the UPS.
• Stronger, longer battery life: Eaton ABM® battery management technology uses an innovative three-stage charging technique that extends battery life by up to 50%.
• More runtime can be added with up to 4 external hot-swappable battery modules, able to run systems for hours if necessary.

Manageability
• The graphical LCD display provides clear information on the UPS’s status and measurements on a single screen. Enhanced configuration capabilities are also available.
• 9PX can meter energy consumption right down to the managed outlet groups. kWh values can be monitored using the LCD or Eaton’s Intelligent PowerTM Software.
• Load segment control enables prioritised shutdowns of non-essential equipment to maximize battery runtime for critical devices.
• 9PX offers Serial and USB connectivity, plus an extra slot for an optional communication card. Eaton’s Intelligent Power.
• Software seamlessly integrates with leading virtualisation environments and cloud orchestrations tools.

Parts numbers*

<table>
<thead>
<tr>
<th>Parts numbers*</th>
<th>9PX 1kVA</th>
<th>9PX 1.5kVA</th>
<th>9PX 2.2kVA</th>
<th>9PX 3kVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS RT3U</td>
<td>9PX1000IR</td>
<td>9PX1500IR</td>
<td>9PX2200IR</td>
<td>9PX3000IR</td>
</tr>
<tr>
<td>EBM</td>
<td>9PXEBM48RT</td>
<td>9PXEBM48RT</td>
<td>2U: 9PXEBM72RT</td>
<td>2U: 9PXEBM72RT</td>
</tr>
<tr>
<td>2m battery connection cable</td>
<td>EBMCL48</td>
<td>EBMCL48</td>
<td>EBMCL72</td>
<td>EBMCL72</td>
</tr>
<tr>
<td>Battery integration system</td>
<td>BINTSYS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Eaton 9PX UPS 1-3 kVA

### Technical Specifications

<table>
<thead>
<tr>
<th></th>
<th>1000</th>
<th>1500</th>
<th>2200</th>
<th>3000VA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating (VA/W)</td>
<td>1000VA/1000W</td>
<td>1500VA/1500W</td>
<td>2200VA/2200W</td>
<td>3000VA/3000W</td>
</tr>
<tr>
<td>Format</td>
<td>RT2U (tower/rack 2U)</td>
<td>RT2U (tower/rack 2U) and RT3U (tower/rack 3U)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Electrical characteristics

#### Technology
On-line double conversion with Power Factor Correction (PFC) system

#### Nominal voltage
200 / 208 / 220 / 230 / 240V

#### Input voltage range
176-276V without derating (up to 100-276V with derating)

#### Input frequency range
40-70Hz, 50/60Hz autoselection, frequency converter mode

#### Efficiency
- up to 91.5% in online mode (up to 97.5% in Hi-efficiency mode)
- up to 92.5% in online mode (up to 97.5% in Hi-efficiency mode)
- up to 93.5% in online mode (up to 98% in Hi-efficiency mode)
- up to 94% in online mode (up to 98% in Hi-efficiency mode)

### Connections

#### Input
1 IEC C14 (10A) 1 IEC C20 (16A) or terminal block on HotSwap MBP HW (Hard-Wired)

#### Outputs
8 IEC C13 (10A) sockets 8 IEC C13 (10A) sockets + 2 IEC C19 (16A) sockets

#### Outputs on HotSwap models
- 4 FR/Schuko sockets or 3 BS sockets or 6 IEC 10A sockets or terminal blocks (HW version)

#### Switched outlet group
2 outlet groups

### Communication

#### Communication ports
1 USB port + 1 serial RS232 port + 1 mini-terminal block for remote ON/OFF + 1 mini-terminal block for remote power off + 1 mini-terminal block for output relay

#### Communication slot
1 slot for Network-MS card (included in netpack versions), ModBus-MS or Relay-MS cards

### Operating conditions, standards and approvals

#### Operating temperature
0 to 40°C

#### Typical noise level
35dB 40dB

#### Safety
IEC/EN 62040-1, UL 1778, CSA 22.2

#### EMC
IEC/EN 62040 -2, FCC Class B, CISPR22 Class B

#### Approvals & markings
CE /CB report (TUV) / cULus / EAC /RCM / KC / Energy Star

### Dimensions H x W x D in mm/ Weight

<table>
<thead>
<tr>
<th></th>
<th>2U version</th>
<th>3U version</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS</td>
<td>86.5<em>440</em>450/17.4kg</td>
<td>86.5<em>440</em>450/18.9kg</td>
</tr>
<tr>
<td>EBM</td>
<td>86.5<em>440</em>450/29.8kg</td>
<td>86.5<em>440</em>450/39.2kg</td>
</tr>
</tbody>
</table>

### Customer service and support

#### Warranty
3 years on electronics

### Batteries

#### Typical backup times*

<table>
<thead>
<tr>
<th></th>
<th>300W</th>
<th>500W</th>
<th>800W</th>
<th>1200W</th>
<th>1800W</th>
<th>2500W</th>
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</thead>
<tbody>
<tr>
<td>9PX 1000</td>
<td>28</td>
<td>16</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9PX 1000 + 1 EBM/+4 EBM</td>
<td>134/530</td>
<td>79/316</td>
<td>47/188</td>
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<tr>
<td>9PX 1500</td>
<td>38</td>
<td>23</td>
<td>13</td>
<td>7</td>
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<tr>
<td>9PX 1500 + 1 EBM/+4 EBM</td>
<td>143/536</td>
<td>86/319</td>
<td>52/192</td>
<td>32/120</td>
<td></td>
<td></td>
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<tr>
<td>9PX 2200</td>
<td>43</td>
<td>25</td>
<td>15</td>
<td>9</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>9PX 2200 + 1 EBM/+4 EBM</td>
<td>206/818</td>
<td>123/491</td>
<td>74/297</td>
<td>47/189</td>
<td>29/118</td>
<td></td>
</tr>
<tr>
<td>9PX 3000</td>
<td>60</td>
<td>36</td>
<td>22</td>
<td>13</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>9PX 3000 + 1 EBM/+4 EBM</td>
<td>221/824</td>
<td>135/504</td>
<td>83/307</td>
<td>52/194</td>
<td>33/122</td>
<td>22/82</td>
</tr>
</tbody>
</table>

#### Battery management
ABM® & temperature compensated charging method (user selectable), automatic battery test, deep discharge protection, automatic recognition of external battery units
Premier series 9 power protection for medium to high density rack environments

**Eaton 9PX 5-11 kVA**

**Performance and Efficiency**
- Double conversion topology. The Eaton 9PX constantly monitors power conditions and regulates voltage and frequency.
- With up to 95% efficiency in online double conversion mode and 98% in high-efficiency mode, the 9PX provides the highest efficiency level in its class to reduce energy and cooling costs.
- With a 0.9 power factor, the 9PX delivers 28% more power than other UPSs in its class. It powers more servers than other UPSs with equivalent VA ratings and lower power factors.
- With a RT (Rack/tower) versatile form factor, the 9PX is the most compact solution in its class delivering up to 5400W in only 3U and 10kW in only 6U.

**Manageability**
- The new graphical LCD provides clear information on the UPS’s status and measurements on a single screen (in seven languages). LCD display position can be adjusted to offer the best viewable angle for tower and rack usage.
- The 9PX can meter energy consumption. kWh values can be monitored using the LCD or Eaton’s Intelligent Power® Software Suite.
- Load segment control enables prioritised shutdowns of non-essential equipment to maximise battery runtime for critical devices. It can also be used to remotely reboot locked-up network equipment or to manage scheduled shutdowns and sequential start-ups.
- The 9PX offers Serial, USB and relay connectivity, plus an extra slot for an optional card (Network card delivered as standard on Netpack version). Eaton’s Intelligent Power® Software Suite compatible with all major OS including virtualization software such as VMware and Hyper-V is included with each UPS.

**Availability and Flexibility**
- The internal bypass allows service continuity in case of internal fault, a Maintenance ByPass is also available (as standard on HotSwap version) for easy replacement of the UPS without powering down critical systems.
- The Eaton 9PX can be paralleled to achieve twice the power of unitary product using HotSync technology, without extra cost on the initial purchase (available in Q2 2013)
- Stronger, longer battery life: Eaton ABM® battery management technology uses an innovative three-stage charging technique that extends battery life by up to 50%.
- More runtime can be added with up to 12 external hotswappable battery modules, able to run systems for hours if necessary. The additional battery modules are automatically recognised by the UPS.
# Eaton 9PX 5-11 kVA

<table>
<thead>
<tr>
<th>Technical Specifications</th>
<th>5kVA</th>
<th>6kVA</th>
<th>8kVA</th>
<th>11kVA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rating (kVA/kW)</strong></td>
<td>5kVA/4.5kW</td>
<td>6kVA/5.4kW</td>
<td>8kVA/7.2kW</td>
<td>11kVA/10kW</td>
</tr>
<tr>
<td><strong>Electrical Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>On-line double conversion with Power Factor Correction (PFC) system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Input voltage range</strong></td>
<td>176-276V without derating (up to 100-276V with derating)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Output voltage/THDU</strong></td>
<td>200/208/220/230/240V +/- 1%; THDU &lt;2%</td>
<td>200/208/220/230/240/250V +/- 1%; THDU &lt;2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Input frequency range/THDI</strong></td>
<td>40-70Hz, 50/60Hz autoselection, frequency converter as standard, THDI &lt; 5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Efficiency</strong></td>
<td>Up to 94% in Online mode, 98% in Hi-Efficiency mode</td>
<td>Up to 95% in Online mode, 98% in Hi-Efficiency mode</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Crest factor/short circuit current</strong></td>
<td>3:1/90A</td>
<td>3:1/90A</td>
<td>3:1/120A</td>
<td>3:1/150A</td>
</tr>
<tr>
<td><strong>Overload capacity</strong></td>
<td>102–110%: 120s, 110–125%: 60s, 125–150%: &gt;150%: 500ms</td>
<td>102–110%: 120s, 110–125%: 60s, 125–150%: 10s, &gt;150%: 900ms</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Connections</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Input</strong></td>
<td>Terminal block (up to 10 mm²)</td>
<td>Terminal block (up to 16 mm²)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outputs</strong></td>
<td>Terminal block + 2 controlled groups of 4 IEC C13 (10A) + 2 IEC C19 (16A)</td>
<td>Terminal block</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outputs with HotSwap Maintenance Bypass</strong></td>
<td>Terminal block + 3 IEC C13 (10A) + 2 IEC C19 (16A)</td>
<td>Terminal block + 4 IEC C19 (16A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batteries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Typical backup times at 50 and 70% load</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9PX</strong></td>
<td>13/10 min</td>
<td>11/8 min</td>
<td>20/15 min</td>
<td>13/9 min</td>
</tr>
<tr>
<td><strong>9PX + 1 EBM</strong></td>
<td>60/40 min</td>
<td>48/34 min</td>
<td>48/32 min</td>
<td>32/21 min</td>
</tr>
<tr>
<td><strong>9PX + 4 EBM</strong></td>
<td>220/150 min</td>
<td>170/120 min</td>
<td>140/100 min</td>
<td>100/70 min</td>
</tr>
<tr>
<td><strong>Battery management</strong></td>
<td>ABM®, and temperature compensated charging method (user selectable), automatic battery test, deep discharge protection, automatic recognition of external battery units.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication ports</strong></td>
<td>1 USB port, 1 RS232 serial port (USB and RS232 ports cannot be used simultaneously), 4 dry contacts (DB9), 1 mini terminal block for remote On/Off and 1 for remote power off, 1 DB15 for parallel operation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication slot</strong></td>
<td>1 slot for Network-MS card (included in Netpack versions), ModBus-MS or Relay-MS cards.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating conditions, standards and approvals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>0 to 40°C continuous</td>
<td>0 to 40°C continuous</td>
<td>0 to 40°C continuous</td>
<td>0 to 40°C continuous</td>
</tr>
<tr>
<td><strong>Noise level</strong></td>
<td>&lt;45dB</td>
<td>&lt;45dB</td>
<td>&lt;48dB</td>
<td>&lt;50dB</td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td>IEC/EN 62040-1, UL 1778, CSA 22.2</td>
<td>IEC/EN 62040-1, UL 1778, CSA 22.2</td>
<td>IEC/EN 62040-1, UL 1778, CSA 22.2</td>
<td>IEC/EN 62040-1, UL 1778, CSA 22.2</td>
</tr>
<tr>
<td><strong>Approvals</strong></td>
<td>CE, CB report (TUV), UL</td>
<td>CE, CB report (TUV), UL</td>
<td>CE, CB report (TUV), UL</td>
<td>CE, CB report (TUV), UL</td>
</tr>
<tr>
<td><strong>Dimensions H x W x D/Weight</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>UPS</strong></td>
<td>440(19&quot;)×130(3U)×685mm/48kg</td>
<td>440(19&quot;)×130(3U)×685mm/48kg</td>
<td>440(19&quot;)×260(6U)×700mm/84kg</td>
<td>440(19&quot;)×260(6U)×700mm/86kg</td>
</tr>
<tr>
<td><strong>EBM</strong></td>
<td>440(19&quot;)×130(3U)×645mm/68kg</td>
<td>440(19&quot;)×130(3U)×645mm/68kg</td>
<td>440(19&quot;)×260(6U)×680mm/65kg</td>
<td>440(19&quot;)×260(6U)×680mm/65kg</td>
</tr>
<tr>
<td><strong>Power module</strong></td>
<td>-</td>
<td>-</td>
<td>440(19&quot;)×130(3U)×700mm/19kg</td>
<td>440(19&quot;)×130(3U)×700mm/21kg</td>
</tr>
<tr>
<td><strong>Customer Service and Support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>3 years</td>
<td>3 years</td>
<td>3 years</td>
<td>3 years</td>
</tr>
</tbody>
</table>

* Runtimes are shown at 0.7 power factor. Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc.
Eaton Micro Data Center

As Edge Computing requirements become more critical for organizations network closet and branch locations, IT departments are in need of a cost effective Micro Data Centre solution which can be deployed quickly and easily.

Eaton’s Micro Data Centre ships fully configured with Eaton’s industry leading power systems, rack precision cooling, power management software and touch screen display. The Micro Data Centre saves space, avoids installation complexity and time-saving. Eaton’s Micro Data Centre provides a lower total cost of ownership (TCO) and a scalable approach to edge computing.

- 3kW DX cooling solution
- 3U Bypass panel assembly
- Eaton enclosure, 42U, 600mm wide, 1200mm deep, castors, assembled
- Fully managed ePDU
- Heat / Smoke Sensors
- Monitoring - smoke & water monitoring
- NETWORK-MS
- Network card-MS SNMP/web adaptor
- Touchscreen display
- UPS - Eaton 9PX rackmount

Save time

Easy to configure racks can be tailored to meet your needs. Components are stocked in-region to ensure fast shipment and easy start-up.

Save money

Fully integrated solutions save money on hardware costs in addition to removing the need for in-room cooling and maximizing network up-time.

Reduce risk

The Micro Data Center provides enhanced physical security with robust environmental controls.
### Eaton Micro Data Center Technical Specifications

#### System Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (H x W x D)</td>
<td>2000mmH (42U) x 600mmW x 1200mmD</td>
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<tr>
<td># of Enclosures</td>
<td>1</td>
</tr>
<tr>
<td>PUE (Full Load)</td>
<td>1.2 (Optimal)</td>
</tr>
<tr>
<td>Input Power</td>
<td>AC 230V, 50/60Hz</td>
</tr>
<tr>
<td>Max. Power Density</td>
<td>3.0kW / Enclosure</td>
</tr>
<tr>
<td>Recommended IT Load</td>
<td>3.0kW (Max)</td>
</tr>
<tr>
<td>Installation Site</td>
<td>Elevated floor installation / general ground installation</td>
</tr>
</tbody>
</table>

#### UPS Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Power Rating</td>
<td>6kVA (2 x 3kVA UPS)</td>
</tr>
<tr>
<td>Max. Equipment Load</td>
<td>3kVA</td>
</tr>
<tr>
<td>Air Conditioning</td>
<td>Powered by dedicated 3kVA UPS</td>
</tr>
<tr>
<td>Model</td>
<td>9PX (3kVA)</td>
</tr>
<tr>
<td>Input Voltage Range</td>
<td>176 – 276V without derating (up to 100-276V with derating)</td>
</tr>
<tr>
<td>Input Frequency Range</td>
<td>40-70Hz, 50/60Hz autoselection</td>
</tr>
<tr>
<td>Power Factor</td>
<td>1.0</td>
</tr>
<tr>
<td>Installation</td>
<td>Rackmount, 2RMU (each)</td>
</tr>
</tbody>
</table>

#### Power Distribution System

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation Dimensions</td>
<td>Rack mount, 3RMU</td>
</tr>
<tr>
<td>Power Distribution</td>
<td>Mains input and UPS output, lightning protection and maintenance bypass</td>
</tr>
<tr>
<td>PDU</td>
<td>G3 Series (EMAB22): Managed PDU (0U), C20 Plug, 16A, 20 x C13, 4 x C19 Outlets</td>
</tr>
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</table>

#### Cooling and Airflow Management System

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cooling Capacity</td>
<td>3.5kW</td>
</tr>
<tr>
<td>A/C Total Air Volume</td>
<td>580m3/h</td>
</tr>
<tr>
<td>A/C Power Supply (Voltage)</td>
<td>198 to 253 VAC</td>
</tr>
<tr>
<td>A/C Installation</td>
<td>Rack-mountable, bottom of the enclosure interior, 5RMU</td>
</tr>
</tbody>
</table>

#### Enclosure Subsystem

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load Rating</td>
<td>1500kg</td>
</tr>
<tr>
<td>Available RMU Space</td>
<td>29 RMU</td>
</tr>
<tr>
<td>Internal Lighting</td>
<td>Standard – rear mounted</td>
</tr>
<tr>
<td>Paint Color</td>
<td>Black (RAL9005)</td>
</tr>
<tr>
<td>Front Door</td>
<td>Single Glass Door (Standard), Solid steel door (optional)</td>
</tr>
<tr>
<td>Rear Door</td>
<td>Double Steel Door (Solid)</td>
</tr>
</tbody>
</table>

#### Monitoring System

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host Monitoring</td>
<td>Rack mount, 1U Height</td>
</tr>
<tr>
<td>Monitoring Interface</td>
<td>7-inch Color Touch Screen</td>
</tr>
<tr>
<td>Remote Monitoring</td>
<td>Web Page Integrated Monitoring Software</td>
</tr>
<tr>
<td>Content</td>
<td>System Power, Cooling, Smoke, Flooding, Door Status</td>
</tr>
<tr>
<td>Sensors</td>
<td>Flooding (1), Temperature and Humidity (1), Smoke (1), Doors (2)</td>
</tr>
</tbody>
</table>

INTERACT WITH THIS PRODUCT USING THE FREE EATON INTERACTIVE APP (ELECTRICAL CHANNEL). SIMPLY DOWNLOAD AND OPEN THE APP, AND SELECT AR MODE. ONCE IN THE APP, SCAN THE LOGO TO INTERACT WITH THIS PRODUCT AND MORE AVAILABLE ON IOS AND ANDROID.
Lowest total cost of ownership and maximum availability – taking scalability, resiliency, safety and efficiency to the next level. The most advanced UPS in its power range, the Eaton 93PS is ideal for small data centres and other mission critical applications where efficiency, reliability, safety and scalability are essential.

**Future-ready**

The rapid adoption of the cloud, constant evolution of IT technologies, increased focus on environmental footprint and sophistication of mission critical applications is demanding even more efficient, resilient, scalable and safe power protection solutions.

The new levels of efficiency and scalability offered by the 93PS minimise Total Cost of Ownership while the safety and resiliency, both in infrastructure and IT layers, maximise availability and ensure business continuity.

**Efficiency**

With high efficiency being translated into reduced electrical and cooling losses, the 93PS helps to minimise operational expenditure costs, in addition to addressing the cost pressures resulting from commoditization of IT services. Increased efficiency also leads to higher sustainability, through reduced carbon emissions. The 93PS’s compliance with environmental regulations and oversight helps with qualification for incentive schemes.

**Scalability**

Scalability helps to optimise capital expenditure by only deploying additional equipment when necessary and providing additional flexibility to respond to your changing needs. The scalability of the 93PS also provides increased flexibility to accommodate the changing requirements of rapidly evolving technologies.

**Resiliency, virtualisation and cloud-readiness**

The ability of a system to absorb faults and still remain in its desired operational state is paramount to minimising costly downtime. The 93PS takes resiliency to the next level by bridging electrical and IT infrastructures.

**Safety**

Ensuring safety in any electrical installation is a must, not only to comply with local electrical regulations and protect personnel, but also to maximise availability. The 93PS design simplifies and facilitates the compliance with local regulation installations.

**Applications:**

- Small data centres
- Commercial buildings and industrial complexes
- Transportation systems
- Hospitals
- Finance and banking critical infrastructure
- Security operations
- Telecommunications installations
- Process control equipment

**Eaton 93PS user display**

For user safety and convenience, the 93PS displays a range of colored LED indicators as operating status alerts. These are displayed both on the cabinet door of the UPS and on screen.

**Hot swappable**

A module can be replaced while the other continues protecting the load.

---

*EATON UPS and Power Quality Products Catalogue  www.powerquality.eaton.com  September 2017*
### Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>8-20 kW</th>
<th>8-40 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS output power rating (1.0 p.f.)</td>
<td>8, 10, 15, 20</td>
<td>8, 10, 15, 20, 30, 40, 8+8, 10+10, 15+15, 20+20</td>
</tr>
<tr>
<td>Model catalogue reference</td>
<td>93PS-XX(20)-YY</td>
<td>93PS-XX(40)-YY</td>
</tr>
<tr>
<td>Number of internal batteries</td>
<td>0 to 2 x 32 blocks</td>
<td>0 to 4 x 32 blocks</td>
</tr>
<tr>
<td>UPS options</td>
<td>Internal maintenance bypass switch (MBS) External maintenance bypass switch External battery cabinets</td>
<td></td>
</tr>
<tr>
<td>Upgradeability</td>
<td>Yes, up to 20 kW</td>
<td>Yes, up to 40 kW</td>
</tr>
<tr>
<td>External paralleling</td>
<td>Up to 4 units with HotSync technology</td>
<td></td>
</tr>
<tr>
<td>UPS topology</td>
<td>Double conversion</td>
<td></td>
</tr>
<tr>
<td>Efficiency in Double conversion mode</td>
<td>&gt;96%</td>
<td></td>
</tr>
<tr>
<td>Efficiency in Energy Saver System (ESS)</td>
<td>Up to 99%</td>
<td></td>
</tr>
<tr>
<td>UPS dimensions (width x depth x height)</td>
<td>335 x 750 x 1300 mm</td>
<td>480 x 750 x 1750 mm</td>
</tr>
<tr>
<td>UPS Degree of protection</td>
<td>IP 20</td>
<td></td>
</tr>
<tr>
<td>Acoustic noise at 1 m, in</td>
<td>&lt; 60 dBA in double conversion</td>
<td></td>
</tr>
<tr>
<td>25 °C ambient temperature</td>
<td>&lt; 47 dBA in ESS</td>
<td></td>
</tr>
<tr>
<td>Maximum service altitude</td>
<td>Maximum 2000 m (6600 ft) with 1% derating per each add. 100 m</td>
<td></td>
</tr>
</tbody>
</table>

### Battery

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery technology</td>
<td>12 V, VRLA</td>
</tr>
<tr>
<td>Battery design life</td>
<td>5 or 10 years</td>
</tr>
<tr>
<td>Battery quantity</td>
<td>32 blocks, 192 cells per battery string</td>
</tr>
<tr>
<td>Battery voltage</td>
<td>384 V</td>
</tr>
<tr>
<td>Nominal Ah capacity (C10)</td>
<td>9 Ah or 7 Ah Long life</td>
</tr>
<tr>
<td>Charge current limit</td>
<td>Default 5 A, configurable Maximum 25 A Default 10 A, configurable Maximum 50 A</td>
</tr>
<tr>
<td>Battery start option</td>
<td>Yes</td>
</tr>
<tr>
<td>Rated input voltage</td>
<td>220/380 V; 230/400 V; 240/415 V</td>
</tr>
<tr>
<td>Voltage tolerance:</td>
<td></td>
</tr>
<tr>
<td>Rectifier input</td>
<td>187 to 276 V</td>
</tr>
<tr>
<td>Bypass input</td>
<td>rated voltage -15% / +10%</td>
</tr>
<tr>
<td>Rated input frequency</td>
<td>50 or 60 Hz, user configurable</td>
</tr>
<tr>
<td>Frequency tolerance</td>
<td>40 to 72 Hz</td>
</tr>
<tr>
<td>Input wiring</td>
<td>3 phases + neutral</td>
</tr>
<tr>
<td>Input power factor</td>
<td>0.99</td>
</tr>
<tr>
<td>Input ITHD</td>
<td>8 kW: &lt; 5% 10 kW: &lt; 4% 15-40 kW: &lt; 3%</td>
</tr>
<tr>
<td>Rated input r.m.s. current</td>
<td>8 kW: 16 A, 10 kW: 24 A, 15 kW: 32 A, 20 kW: 48 A, 30 kW: 63 A</td>
</tr>
<tr>
<td>380V</td>
<td>13 A, 16 A, 24 A, 32 A, 48 A, 63 A</td>
</tr>
<tr>
<td>400V</td>
<td>12 A, 15 A, 23 A, 30 A, 46 A, 61 A</td>
</tr>
<tr>
<td>415V</td>
<td>12 A, 15 A, 22 A, 29 A, 44 A, 58 A</td>
</tr>
<tr>
<td>Soft start capability</td>
<td>Yes</td>
</tr>
<tr>
<td>Back feed protection</td>
<td>Yes, for rectifier and bypass lines</td>
</tr>
</tbody>
</table>

### Output

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output wiring</td>
<td>3 phases + neutral</td>
</tr>
<tr>
<td>Rated output voltage</td>
<td>220/380 V; 230/400 V; 240/415 V, configurable</td>
</tr>
<tr>
<td>Total voltage harmonic distortion</td>
<td>100% linear load: &lt; 1% 100% non-linear load: &lt; 5%</td>
</tr>
<tr>
<td>Overload capability</td>
<td>On inverter: 10 min, 102-110% load, 60 sec, 111-125% load, 10 sec, 126-150% load, 300 ms &gt;150% load On bypass: Continuous &lt; 125% load, 20 ms &gt;1000% load</td>
</tr>
<tr>
<td>Load power factor - Rated</td>
<td>1</td>
</tr>
<tr>
<td>Load power factor - Permitted range</td>
<td>0.8 lagging to 0.8 leading</td>
</tr>
</tbody>
</table>

### Communication Circuits

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>MiniSlot</td>
<td>2 communication bays</td>
</tr>
<tr>
<td>Network/SNMP interface</td>
<td>Yes, standard</td>
</tr>
<tr>
<td>Standard connectivity ports</td>
<td>Mini-slot ports for optional cards, Device USB and Host USB, RS-232 service port, relay output, 5 building alarm inputs and a dedicated EPO, Web and SNMP card</td>
</tr>
</tbody>
</table>

### Compliance with Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety (ICB certified)</td>
<td>IEC 62040-1</td>
</tr>
<tr>
<td>EMC</td>
<td>IEC 62040-2</td>
</tr>
<tr>
<td>Performance</td>
<td>IEC 62040-3</td>
</tr>
</tbody>
</table>

For information on product warranty, please visit [http://powerquality.eaton.com/Products-services/Backup-Power-UPS/93PS.aspx?cx=22](http://powerquality.eaton.com/Products-services/Backup-Power-UPS/93PS.aspx?cx=22)
Essential protection for Data Centre and Industrial applications

Eaton 93E

The Eaton® 93E UPS delivers superior power protection for ever-expanding loads in today’s space-constrained data centres. Facilitating a lower total cost of ownership (TCO) through a combination of energy-efficiency, high reliability and a compact footprint the 93E is an ideal solution for small - to medium - sized data centres and other applications desiring highly reliable power protection.

Real compatibility
Active power factor correction (PFC) provides 0.99 input power factor and <5% ITHD, thus eliminating interference with other critical equipment in the same network and enhancing compatibility with generators. The 93E is optimised for protecting modern 0.9 p.f. rated IT equipment without the need to oversize.

True reliability
Patented Eaton Hot Sync® technology makes it possible to parallel up to four UPSs to increase availability or add capacity. The technology enables load sharing without any communication line, thus eliminating single point of failure.

User Interface
Large LCD graphically displays UPS status and offers easy access to measurements, controls and settings.

Energy-efficient design
With a transformer-free design and sophisticated sensing and control circuitry the 93E is capable of achieving up to a 98% efficiency rating, making it one of the most energy-efficient UPSs in its class - and it still provides maximum load protection. Unlike most high efficiency UPSs, the 93E:
- Provides surge suppression for the load
- Detects the location of faults (utility or load) and takes the appropriate action
- Switches to double-conversion operation in less than 4ms. High system efficiency reduces utility cost, extends battery run times and ensures cooler operating conditions.

Connectivity
With Eaton® Mini-Slot connectivity cards, you can monitor, manage and remotely shutdown UPSs across the network.
- Network Card—MS Web/SNMP Card allows you to connect your 93E UPS directly to the Ethernet network and the Internet
- Network and MODBUS Card—MS provides remote monitoring of a UPS system through a Building Management System (BMS) or Industrial Automation System (IAS)
- Relay Card—MS enables provides the essential dry-contact interface between your Eaton UPS and any relay-connected computer as well as a variety of industrial applications

Compact & serviceable design
Small footprint occupies minimal floor space:
- Up to 35% smaller than similar competitive solutions
- 600mm wide UPS cabinet (80-200kVA models) enables seamless in-row” integration with IT racks

The 93E is easily and quickly serviced to provide the highest level of availability with Mean Time to Repair (MTTR) <30 minutes. With its Easy Capacity Test feature the 93E can test its entire power train under full load stress without the requirement of an external load.

Software
Eaton’s Intelligent Power® Software Suite incorporates two important applications for ensuring quality power and uptime: monitoring and management of power devices across the network combined with automatic, graceful shutdown when faced with an extended power outage.
- Monitor and manage multiple power devices across your network
- Extend the uptime of dual-powered servers with redundancy capabilities
- Enable server shutdown and live migration events
- To learn more, please visit www.eaton.com/intelligentpower

System accessories
- Battery cabinets & battery circuit breakers (60-200kVA)
- Maintenance Bypass Switches (MBS) (100-200kVA, standard on 15-80kVA)
- Top cable entry (60-200kVA, standard on 300-400kVA)
- System parallel modules (60-200kVA)
- Dual input kit (15-80kVA)
- IP21 hood (15-200kVA)
- Rear chimney (60-200kVA)

Applications:
- Small to medium data centres
- Corporate
- Telecom
- Healthcare
- Banking
- Industrial
- Education
- Government
## Eaton 93E Technical Specifications

### Power
- **Ratings**
  - 15kVA/13.5kW
  - 20kVA/18kW
  - 30kVA/27kW
  - 40kVA/36kW
  - 60kVA/54kW
  - 80kVA/72kW
  - 100kVA/90kW
  - 120kVA/108kW
  - 160kVA/144kW
  - 200kVA/180kW
  - 300kVA/270kW
  - 400kVA/360kW

### Topology
- Double-conversion online UPS

### Operating frequency
- 50/60 Hz (40 to 72 Hz)

### Input power factor
- >0.99 typical

### Electrical input
- **Input current distortion**
  - 5% THD

### Nominal input voltage
- 400/230V, 4 wire (380/415V selectable)

### Input voltage range
- -15%, +20% from nominal (400V) at 100% load without depleting battery

### Electrical output
- **Nominal output voltage**
  - 400/230, 4 wire (380/415V selectable)

### Output voltage regulation
- +1% Static; <5% dynamic at 100% resistive load change, <20 ms response time

### Battery
- **Battery**
  - 192 to 240 Cells (Continual selectable for 15-80kVA) 216/222/228/234/240 Cells (Selectable for 100-400kVA)

### General
- **Charging method**
  - ABM Cyclic Charging

### Efficiency
- **Efficiency**
  - Up to 98% High-efficiency mode (15-80kVA) Up to 98.5% High-efficiency mode (100-400kVA) Up to 94%
  - Double-conversion mode

### Overload
- 150% for 1 minute, 125% for 10 minutes, >150% for 150ms

### UPS bypass
- Automatic on overload or UPS failure

### Parallel technology
- Powerware Hot SyncR Technology

### Dimensions W x D x H (mm)
- 500 x 710 x 960
- 600 x 800 x 1876
- 1600 x 820 x 1880

### Cabinet rating
- IP20 with standard washable dust filters

### Weights without internal battery
- 15/20kVA-72 kg, 30kVA-91kg, 40kVA-202kg, 60kVA-245kg, 80kVA-283kg, 100kVA-320kg, 120kVA-311kg, 160/200kVA-457kg, 300kVA-860kg, 400kVA-970kg

### Weights with internal battery
- 15/20kVA-272kg, 30kVA-376kg, 40kVA-490kg

### Communications
- **Display**
  - Graphical LCD with blue backlight

### Environmental
- **Operating temperature**
  - 0°C to +40°C

- **Storage temperature**
  - -25°C to +65°C without batteries
  - +15°C to +25°C with batteries

- **Relative humidity**
  - 5-95%, non-condensing

### Audible noise
- 15-20kVA 55 dBA at 1m typical
- 30-40kVA 62 dBA at 1m typical
- 60-120kVA 65 dBA at 1m typical
- 160-200kVA 70 dBA at 1m typical
- 300-400kVA 73 dBA at 1m typical

### Altitude
- <1000m at +40°C

### Certifications
- **EMI standards**
  - EN55022/EN55024

- **EMC compliance**
  - IEC 62040-2

- **Quality**

### Communication accessories
- **Network-MS**
  - Web/SNMP Card

- **Modbus-MS**
  - Web/SNMP and Modbus Card

- **Relay-MS**
  - Relay (Dry Contact) Card -DB9 Connection

- **Industrial Relay**
  - Relay (Dry Contact) Card -Terminal Connection

- **118750224-001**
  - Environmental Monitor Probe (EMP) kit (need to plug into Web/SNMP Card or Web/SNMP and Modbus Card to work)

For information on product warranty, please visit [http://powerquality.eaton.com/Products-Services/backup-power-ups/9PHD-Industrial.aspx?cx=22](http://powerquality.eaton.com/Products-Services/backup-power-ups/9PHD-Industrial.aspx?cx=22)
Premier modular protection for high availability systems

Eaton 93PM

Introducing the Eaton 93PM UPS, helping you to combat the costs of energy and the ever-increasing power demands of IT infrastructure. Featuring industry-leading operating efficiency of 96.7% and world-class intelligent software solutions, the 93PM is the surest way to secure the continuity of your mission-critical applications. All this compactly in 0.5 m².

On-line double conversion topology ensures the UPS output is not affected by any abnormalities in the utility power and keeps critical load equipment protected against all common power problems. With Eaton 93PM UPS, modern multi-level converter technology ensures that in double conversion no energy is wasted and the UPS operating efficiency is top-of-market 96.7% resulting in significant savings in operational costs.

Energy Saver System delivers superior > 99% efficiency. Even small increases in UPS efficiency can quickly translate into thousands of dollars, realised in more real power and lower cooling costs. Energy Saver System enables > 99% efficiency across the typical UPS operating range. In ESS, the load is powered securely through the static bypass line with double conversion available on-demand with typical 2 ms transition time in the event of any abnormality on supply source. When operating in ESS mode, the load is protected with inherent surge suppression.

When utility power quality is high, ESS can reduce UPS power losses by 75% as it runs on double conversion only when needed. The Eaton 93PM UPS is a high power density solution. In a footprint of just 0.5 m², it can provide full rated power and standard backup time with internal batteries.

Eaton’s advanced charging algorithm prolongs battery service life significantly compared to traditional charging methods. Automatic battery tests ensure any defects on batteries are detected and any failed blocks replaced on time. Battery health data is available for viewing easily through the display. By being able to monitor the condition of batteries and view a history log of test data, system maintenance can be better planned and scheduled ahead.

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**Technology:** Series 9 (Double Conversion On Line)
**Rating:** 30-200kW at 1.0 p.f.
**Voltage:** 230/400VAC 50/60 Hz
**Backup:** 10-20 min internal (extendable up to several hours)
**Configuration:** Cabinet

---

**Product highlights:**
- 96.7% efficiency in double conversion
- > 99% efficiency with Energy Saver System (ESS)
- Standard 10-20 minutes full load runtime with internal batteries
- Intelligent Power Manager® allows you to monitor and manage your UPS system as an integral part of power infrastructure
- Plugs into leading virtualisation management systems like VMware vCenter, Microsoft SCVMM and Citrix XenCenter
- Display shows power quality, energy consumption and efficiency trends
- Data logging feature allows easy measurement, monitoring and managing

**Options:**
- Variety of connectivity card options
- Environmental Monitoring Probe
- Extended runtimes with line-and-match external battery cabinets
- External maintenance bypass (wall mountable)
- System Parallel Modules

**Typical applications:**
- Data centres with rack mount blade servers
- Telecommunications

---

Door LEDs provide "at-a-glance" status indication

An Eaton Green Solution
## Eaton 93PM

### Eaton 93PM Technical Specifications

#### General
- **UPS output power rating (1.0 p.f.)**: 30, 40, 50, 80, 100, 120, 150, 160, 200 kW
- **Efficiency in double conversion mode**: Up to 97%
- **Efficiency in Energy Saver System (ESS)**: > 99%
- **Field upgradeable**: Yes
- **Inverter/rectifier topology**: Transformer-free IGBT with PWM
- **Audible noise**: 30–50 kW: < 60 dBA, 80–200 kW: < 65 dBA, ESS operation: < 47 dBA
- **Altitude (max)**: 1000 m without derating (max 2000 m)

#### Input
- **Input wiring**: 3ph + N + PE
- **Nominal voltage rating (configurable)**: 220/380, 230/400, 240/415 V 50/60 Hz
- **Input voltage range**: High +20% rectifier input, 10% bypass input, Low –15% at 100% load, –40% at 50% load without battery discharge
- **Input frequency range**: 40–72 Hz
- **Input Power Factor**: 0.99
- **Input ITHD**: 30 kW: < 4.5%, 40–200 kW: < 3%
- **Soft start capability**: Yes
- **Internal backfeed protection**: Yes

#### Battery
- **Battery type**: VRLA
- **Charging method**: ABM technology or Float
- **Temperature compensation**: Optional
- **Battery nominal voltage (VRLA)**: 432 V (36 x 12 V, 216 cells) or 480 V (40 x 12 V, 240 cells) Note: Strings with different battery voltage may not be paralleled!
- **Charging current maximum**: 30–50 kW 16.5 A, 80–100 kW 33 A, 120–150 kW 49.5 A, 160–200 kW 66 A
- **Battery start capability**: Yes

#### Output
- **Output wiring**: 3ph + N + PE
- **Nominal voltage rating (configurable)**: 220/380, 230/400, 240/415 V 50/60 Hz
- **Output UTHD**: < 1% (100% linear load), < 5% (reference non-linear load)
- **Rated output power factor**: 1.0
- **Permitted load power factor**: 0.8 lagging – 0.8 leading
- **Overload on inverter**: 10 min 102–110%; 60 sec 111–125%; 10 sec 126–150% 300 ms > 150%. On battery mode 300 ms > 126%
- **Overload when bypass available**: Continuous < 125%, 10 ms 1000% Note: Bypass fuses may limit the overload capability!

#### Accessories options
- **External battery cabinets with long-life batteries**, **External maintenance bypass switch**, **Integrated manual bypass (up to 150 kW)** and **MiniSlot connectivity** (Web/SNMP, ModBus/Jbus, Relay)

#### Communications
- **MiniSlot**: 3 communication bays
- **Network/SNMP interface**: Yes, standard
- **Serial ports**: Built-in host and device USB
- **Relay inputs/outputs**: 5 relay inputs and dedicated EPO, 1 relay output

#### Environmental
- **Operating temperature**: 0°C to +40°C
- **Storage temperature**: -25°C to +55°C
- **Altitude**: 1000m without derating (Maximum 2000m)
- **Audible noise at 1 metre**: 55dB @ 75% Load, 60dB @ 100% Load

#### Compliance with standards
- **Safety (CB certified)**: IEC 62040-1
- **EMC**: IEC 62040-2
- **Performance**: IEC 62040-3

For information on product warranty, please visit [http://powerquality.eaton.com/Products-services/Backup-Power-UPS/93PM.aspx?cx=22](http://powerquality.eaton.com/Products-services/Backup-Power-UPS/93PM.aspx?cx=22)
Taking energy efficiency and scalability to the next level

Eaton 93PR

The most advanced UPS in its power range, the Eaton 93PR is ideal for small to mid-sized data centres and other mission critical applications where efficiency, reliability, safety and scalability are essential.

Available in 200kW frame sizes, the modular design of the 93PR enables it to suit a wide range of requirements. And, whichever one you choose, you can be sure it will provide the lowest Total Cost of Ownership combined with maximum availability, for cost-efficient business continuity. Ensuring that you can always access the power your mission critical application requires – under all circumstances – without compromising business performance or safety, the 93PR is the most efficient, scalable, Cloud-ready and safe UPS you can choose.

Efficiency
With high efficiency being translated into reduced electrical and cooling losses, the 93PR helps to minimise operational expenditure costs, in addition to addressing the cost pressures resulting from commoditisation of IT services. Increased efficiency also leads to higher sustainability, through reduced carbon emissions.

Scalability
Scalability helps to optimise capital expenditure by only deploying additional equipment when necessary and providing additional flexibility to respond to your changing needs. The scalability of the 93PR also provides increased flexibility to accommodate the changing requirements of rapidly evolving technologies.

Resiliency, virtualisation & cloud-readiness
The ability of a system to absorb faults and still remain in its desired operational state is paramount to minimising costly downtime. The 93PR takes resiliency to the next level by bridging electrical and IT infrastructures.

Safety
Ensuring safety in any electrical installation is a must. Safe hot-swappable design and inbuilt back-feed protection ensures safety and compliance with regulations.

Easy management
The 93PR provides easier access to detailed status information through its large, user-friendly 7" LCD touchscreen interface.

Due to its modular design, a 93PR power module can be replaced or added while another module continues protecting the load. This eliminates the need to go to bypass for module replacement or upgrading (MTTR: 0 minutes). Replacement and upgrade (N+1) operations typically take less than 10 minutes.

The centralised topology of the 93PR is ideal for scalable systems, as it provides full bypass capacity from day one, whereas modular designs with static switches in every power module can have a severe negative impact on the selectivity of the system due to undersized static bypass. This can compromise the availability of the overall system.

Due to continuous product improvement programmes, specifications are subject to change without notice.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Rating</th>
<th>Dimensions (WxDxH)mm</th>
<th>Weight(kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>730-80492-00P</td>
<td>Eaton 93PR 25kW (UPM) Uninterruptible Power Module</td>
<td>25KW</td>
<td>460 x 600 x 130</td>
<td>28</td>
</tr>
<tr>
<td>9106-42218-00P</td>
<td>Eaton 93PR 200kW Frame, internal back-feed</td>
<td>200kW max</td>
<td>603 x 1013 x 2050</td>
<td>310</td>
</tr>
<tr>
<td>9106-42217-00P</td>
<td>Eaton 93PR 200kW Frame, internal back-feed, MBS</td>
<td>200kW max</td>
<td>603 x 1013 x 2050</td>
<td>368</td>
</tr>
</tbody>
</table>

Green light bar showing healthy UPS

Red light bar showing alerts on system
## Eaton 93PR Technical Specifications

### General

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS output power rating (1.0 p.f.)</td>
<td>25, 50, 75, 100, 125, 150, 175, 200kW</td>
</tr>
<tr>
<td>Efficiency in double conversion mode</td>
<td>&gt; 96%</td>
</tr>
<tr>
<td>Efficiency in Energy Saver System (ESS)</td>
<td>&gt; 99%</td>
</tr>
<tr>
<td>Static bypass rating</td>
<td>200kW</td>
</tr>
<tr>
<td>External paralleling</td>
<td>up to 4 units with HotSync technology</td>
</tr>
<tr>
<td>UPS topology</td>
<td>Double conversion</td>
</tr>
<tr>
<td>UPS degree of protection</td>
<td>IP20</td>
</tr>
<tr>
<td>Acoustic noise at 1 m, in 25 °C ambient temperature</td>
<td>&lt; 70 dBA in double conversion, &lt; 55 dBA in ESS</td>
</tr>
<tr>
<td>Altitude (max)</td>
<td>1000m above sea level at 40 °C. Maximum 2000m with 1% derating per each add. 100 m</td>
</tr>
</tbody>
</table>

### Input

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated input voltage</td>
<td>220/380, 230/400, 240/415 V 50/60 Hz</td>
</tr>
<tr>
<td>Voltage tolerance - Rectifier input</td>
<td>187 to 276 V</td>
</tr>
<tr>
<td>Voltage tolerance - Bypass input</td>
<td>rated voltage -15% / +10%</td>
</tr>
<tr>
<td>Rated input frequency</td>
<td>50 or 60 Hz, user configurable</td>
</tr>
<tr>
<td>Frequency tolerance</td>
<td>40 to 72 Hz</td>
</tr>
<tr>
<td>Input wiring</td>
<td>3 phase + neutral</td>
</tr>
<tr>
<td>Input power factor at 100% load</td>
<td>&gt; 0.99</td>
</tr>
<tr>
<td>Input ITHD</td>
<td>&lt; 3%</td>
</tr>
<tr>
<td>Rated input r.m.s current</td>
<td>380V: 40 A, 80 A, 120 A, 159 A, 199 A, 239 A, 278 A, 318 A</td>
</tr>
<tr>
<td>Soft start capability</td>
<td>Yes</td>
</tr>
<tr>
<td>Internal backfeed protection</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Output

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output wiring</td>
<td>3 phase + neutral</td>
</tr>
<tr>
<td>Rated output voltage rating</td>
<td>220/380 V, 230/400 V, 240/415 V, configurable</td>
</tr>
<tr>
<td>Total voltage harmonic distortion</td>
<td>&lt; 1% (100% linear load); &lt; 5% (100% non-linear load)</td>
</tr>
<tr>
<td>Output power factor</td>
<td>1</td>
</tr>
<tr>
<td>Permitted load power factor</td>
<td>0.8 lagging to 0.8 leading</td>
</tr>
<tr>
<td>Overload on inverter</td>
<td>10 min 102-110%, 60 sec 111-125%, 10 sec 126-150%, 300 ms &gt; 150%</td>
</tr>
<tr>
<td>Overload on bypass</td>
<td>Continuous &lt; 125%, 20 ms 1000%</td>
</tr>
</tbody>
</table>

### Battery

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery type</td>
<td>12V, VRLA</td>
</tr>
<tr>
<td>Charging method</td>
<td>ABM technology or Float</td>
</tr>
<tr>
<td>Temperature compensation</td>
<td>Optional</td>
</tr>
<tr>
<td>Battery nominal voltage (VRLA)</td>
<td>480 V</td>
</tr>
<tr>
<td>Battery quantity</td>
<td>36 to 44 blocks. Default is 40 blocks</td>
</tr>
<tr>
<td>Charge current limit</td>
<td>Default 5A, configurable maximum 25A per UPM</td>
</tr>
<tr>
<td>Battery start capability</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Communications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minislot</td>
<td>3 communication bays</td>
</tr>
<tr>
<td>Network/SNMP interface</td>
<td>Yes, optional</td>
</tr>
<tr>
<td>Serial ports</td>
<td>Built-in host and device USB</td>
</tr>
<tr>
<td>Standard connectivity ports</td>
<td>Mini-slot ports for optional cards, Device USB and Host USB, RS-232 service port, relay output, 5 building alarm inputs and a dedicated EPO</td>
</tr>
</tbody>
</table>

### Accessories

- MiniSlot connectivity (Web/SNMP, ModBus/Jbus, Relay)
- External Battery Cabinet (EBC)
- Parallel Tie Cabinet (PTC)
- External Maintenance Bypass Switches (EMBS)
- External Battery Cabinet Breaker (EBCB)

### Compliance with standards

- Safety: IEC 62040-1
- EMC: IEC 62040-2
- Performance: IEC 62040-3

For information on product warranty, please visit [http://powerquality.eaton.com/Products-services/Backup-Power-UPS/93PR.aspx?cx=22](http://powerquality.eaton.com/Products-services/Backup-Power-UPS/93PR.aspx?cx=22)
96.3% double conversion efficiency, delivers 10% more power

Eaton 9395P

10% more power
- Complete isolation of output power from all input power anomalies, to deliver 100% conditioned, perfect sine-wave output – even during severe power disturbance.
- High efficiency even when UPS load levels are low, optimised by Variable Module Management System (VMMS).
- Energy Saver System (ESS) improves efficiency levels to 99% by suspending power modules when double conversion is not required. Switches to double conversion mode in less than 2 milliseconds in event of pre-set input limits being exceeded. Filtering against fast low-energy transients provided by ESS.
- Producing 18% less heat helps reduce the need for cooling. Designed for continuous operation at ambient temperatures up to 40°C without de-rating. Can also deliver safe power in higher temperatures without shutting down.

Scalability and flexibility
- Number of power modules per UPS can be specified.
- Layout can be chosen to suit installation: back-to-back, L-shaped etc. Front-accessible design minimises installation costs and saves valuable data centre space.
- Preferred bypass topology can be specified. Additional modules can be added as power load increases.
- Centralised multi-module paralleled 9395P systems are supported by the Eaton System Bypass Module (SBM). Available in ratings from 2000 A to 5000 A as standard, the SBM includes a continuous-duty centralised static switch, backfeed protection device and centralised bypass systems.
- Service disconnect in each power module allows easy maintenance while the UPS is supporting the load in double conversion mode.
- More than 90% of materials used can be recycled, decreasing end-of-life impact.

Ultimate resiliency
- HotSync® patented load-sharing technology enables parallel operating of static converters without communication or loadshare signals. Eliminating the communication link eliminates risk of single point of failure.
- One static switch per UPS enables the full bypass capacity to be achieved from day one. Power modules can be added as loads increase.
- Wide power factor range meets rapidly changing load power factor without de-rating.
- Intelligent battery charging through Advanced Battery Management prevents unnecessary charging and significantly retards battery wear rate.

Applications
- Large data centres, infrastructure projects, industrial complexes and other buildings
- Process control equipment
- Finance and banking infrastructure
- Healthcare
- Transportation systems
- Security operations
- Telecommunications installations

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**Eaton 9395P**

**Eaton 9395P Technical Specifications**

<table>
<thead>
<tr>
<th>UPS output power rating</th>
<th>250</th>
<th>300</th>
<th>500</th>
<th>600</th>
<th>750</th>
<th>900</th>
<th>1000</th>
<th>1200</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>kVA</strong></td>
<td>250</td>
<td>300</td>
<td>500</td>
<td>600</td>
<td>750</td>
<td>900</td>
<td>1000</td>
<td>1200</td>
</tr>
<tr>
<td><strong>kW</strong></td>
<td>250</td>
<td>300</td>
<td>500</td>
<td>600</td>
<td>750</td>
<td>900</td>
<td>1000</td>
<td>1200</td>
</tr>
</tbody>
</table>

**General**
- Efficiency in double conversion mode (full load) 95.60%
- Efficiency in double conversion mode (half load) 96.30%
- VMMS (double conversion) Significantly increased efficiency at low loads
- Efficiency in Energy Saver System (ESS) Up to 99.3%
- Distributed paralleling with Hot Sync technology Up to 8
- Internal N+1 redundancy capable In 600 kVA: 300 kVA In 900 kVA: 600 kVA In 1200 kVA: 900 kVA
- Field upgradable
- Inverter/rectifier topology Transformer-free IGBT with PWM
- Audible noise 78 dB (300 kVA); <81 dB (600 kVA); <83 dB (900 kVA); <85 dB (1200 kVA)
- Altitude (max) 1000 m without derating (max 2000 m)

**Input**
- Input wiring 3 ph + N + PE
- Nominal voltage rating (configurable) 220/380, 230/400, 240/415 V 50/60 Hz
- Input voltage range +15% / -10% for 380 V
- Input frequency range 45-65 Hz
- Input power factor 0.99
- Input ITHD <3% on nominal load in double conversion mode
- Soft start capability
- Internal backfeed protection Yes, standard

**Output**
- Output wiring 3 ph + N + PE
- Nominal voltage rating (configurable) 220/380, 230/400, 240/415 V 50/60 Hz
- Output UTHD <2% (100% linear load), <5% (non linear load)
- Output power factor 0.1
- Permitted load power factor 0.7 lagging - 0.8 leading
- Overload on inverter 10 min 100-110%; 30 sec 110-125%; 10 sec 125-150%; 300 ms >150%
- Overload when bypass available Continuous <115%, 20 ms 1000% Note! Bypass fuses may limit the overload capability

**Battery**
- Type VRLA, AGM, Gel, Wet Cell, Lithium
- Charging method Current limited constant voltage charging, or Eaton Advanced Battery Management (ABM)
- Temperature compensation Optional
- Battery nominal voltage (lead-acid) 480 V (40 x 12 V, 240 cells)
- Charging current / Model 300 600 900 1200
- Max A 120 240 360 480

**Communications**
- X-Slot 4 communication bays
- Relay inputs/outputs 5/1 programmable

**Compliance with standards**
- Safety (CB certified) IEC 62040-1
- EMC IEC 62040-2
- Performance IEC 62040-3

<table>
<thead>
<tr>
<th>Dimensions and weights (wxdxh)</th>
<th>300 kW</th>
<th>600 kW</th>
<th>900 kW</th>
<th>1200 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1350 x 880 x 1880 mm</td>
<td>830 kg</td>
<td>1440 kg</td>
<td>2680 kg</td>
<td>3120 kg</td>
</tr>
<tr>
<td>1890 x 880 x 1880 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3710 x 880 x 1880 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4450 x 880 x 1880 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Limited by maximum UPS input current rating

For information on product warranty, please visit [http://powerquality.eaton.com/Products-services/Backup-Power-UPS/9395Paspx?cx=22](http://powerquality.eaton.com/Products-services/Backup-Power-UPS/9395Paspx?cx=22)
Eaton industrial offering

Eaton 93PS IP42 Industrial Upgrade Kit

To harden the 93PS for harsh environmental Eaton have a IP42 kit available. The kit helps to prevent ingress of foreign materials & water into the unit increase its service life in harsh environments, while maintaining the benefits of a commercial UPS.

93PS 8 to 40kVA -
3 Phase In , 3 Phase Out.

- IP42 Classifications
- Dust filters
- Modular Redundancy
- Low Mean Time to Repair
- Class Leading Efficiency
- Low THDi
- 2 Year Standard warranty.

Eaton 93PS user display

For user safety and convenience, the 93PS displays a range of colored LED indicators as operating status alerts. These are displayed both on the cabinet door of the UPS and on screen.
Eaton industrial offering

Eaton ExoCab series outdoor cabinets

The Eaton ExoCab series of outdoor power system cabinets, are a versatile range of solutions for housing UPS, DC systems, batteries and customer equipment in harsh and open outdoor situations. These cabinets are designed to resist the rigors of nature, yet provide a secure and controlled environment for the electronics associated with UPS or DC systems. Various cooling options are available to best suit the environment and equipment being housed.

ExoCab34
- UPS, DC power, battery and other equipment options
- Cost effective
- 34U of equipment space
- High level of protection from the environment
- Durable aluminium exterior & stainless steel internal parts.
- Three-point locking. Lock to customer requirements, including triangle key, lock barrels compatible with other Eaton cabinets, etc.
- Anti-graffiti finish
- Options:
  - Sealed
  - Fresh air
  - Heat exchanger
  - Air conditioned

ExoCab18
- UPS, DC power, Battery and Combined options
- Cost effective and compact
- High level of protection from the environment
- Durable aluminium exterior & stainless steel internal parts.
- Two-point locking. Lock to customer requirements, including triangle key, lock barrels compatible with other Eaton cabinets, etc.
- Anti-graffiti finish
- Battery bay gas vents
- Generator secure point eyebolt
- Optional:
  - Generator connection
  - Rear door
  - Heat exchanger
  - Air conditioner
Energy-efficient double conversion UPS

Eaton 9PX Marine

Performance and efficiency
- 9PX Marine is the first UPS in its class to provide Unity power factor (VA=W). It delivers 11% more power than any other UPS as well as powering more servers with equivalent VA ratings and lower power factors.
- 9PX can meter energy consumption right down to the managed outlet groups. kWh values can be monitored using the LCD or Eaton's Intelligent PowerTM Software.
- Energy Star qualified, the 9PX Marine provides the highest efficiency level to reduce energy and cooling costs.

Availability and Flexibility
- The graphical LCD display provides clear information on the UPS’s status and measurements on a single screen. Enhanced configuration capabilities are also available.
- 9PX offers Serial and USB connectivity, plus an extra slot for an optional communication card. Eaton's Intelligent Power Software seamlessly integrates with leading virtualisation environments and cloud orchestrations tools.
- More runtime can be added with up to 4 external hot-swappable battery modules, able to run systems for hours if necessary.

Reliability
- Double conversion topology constantly monitors power conditions and regulates voltage and frequency.
- The internal bypass allows service continuity in case of internal fault, a maintenance bypass is also available for easy replacement of the UPS.
- With coated boards and hi-temperature environment compatibility, 9PX Marine is designed for Marine & Offshore environments.
- Stronger, longer battery life: Eaton ABM® battery management technology uses an innovative three-stage charging technique that extends battery life by up to 50%.
- DNV-GL type approved UPS.
Eaton 9PX Marine

**Technical Specifications**

<table>
<thead>
<tr>
<th>Rating (VA/W)</th>
<th>1500VA/1500W</th>
<th>3000VA/3000W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>RT2U (tower/rack 2U)</td>
<td>RT3U (tower/rack 3U)</td>
</tr>
</tbody>
</table>

**Electrical characteristics**

- **Technology**: On-line double conversion with Power Factor Correction (PFC) system
- **Nominal voltage**: 200/208/220/230/240V
- **Input voltage range**: 176-276V without derating (up to 100-276V with derating)
- **Input frequency range**: 40-70Hz, 50/60Hz autoselection, frequency converter mode
- **Efficiency**: up to 92.5% in online mode (up to 97.5% in Hi-efficiency mode) up to 94% in online mode (up to 98% in Hi-efficiency mode)

**Connections**

- **Input**: 1 IEC C14 (10A) 1 IEC C20 (16A)
- **Outputs**: 8 IEC C13 (10A) sockets 8 IEC C13 (10A) sockets + 2 IEC C19 (16A) sockets

**Batteries**

- **Typical backup times*:**
  - 300W: 38 23 13 7
  - 500W: 143/536 86/319 52/192 32/120
  - 800W: 60 36 22 13
  - 1200W: 221/824 135/504 83/307 52/194
  - 1800W: 33/122 22/82
  - 2500W: 60 36 22 13

**Battery management**: ABM® & temperature compensated charging method (user selectable), automatic battery test, deep discharge protection, automatic recognition of external battery units

**Communication**

- **Communication ports**: 1 USB port + 1 serial RS232 port + 1 mini-terminal block for remote ON/OFF + 1 mini-terminal block for output relay
- **Communication slot**: 1 slot for Network-MS card (included in netpack versions), ModBus-MS or Relay-MS cards

**Operating conditions, standards and approvals**

- **Operating temperature**: 0 to 40°C
- **Typical noise level**: 35dB 40dB
- **Safety**: IEC/EN 62040-1, UL 1778, CSA 22.2
- **EMC**: IEC/EN 62040 -2, FCC Class B, CISPR22 Class B
- **Approvals & markings**: DNV-GL Type approved /CE /CB report (TUV) / cULus / EAC /RCM / KC / Energy Star

**Dimensions H x W x D in mm/ Weight**

- **UPS**: 86.5*440*450/18.9kg 130*440*485/274kg
- **EBM**: 86.5*440*450/29.8kg 130*440*485/38.2kg

**Customer service and support**

- **Warranty**: 3 years

---

* Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc.

---

**Parts numbers**

<table>
<thead>
<tr>
<th>9PX 1.5kVA</th>
<th>9PX 3kVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS</td>
<td>9PX1500ITM</td>
</tr>
<tr>
<td>EBM</td>
<td>9PXEBM48RT2U</td>
</tr>
<tr>
<td>2m battery connection cable</td>
<td>EBMCB48</td>
</tr>
<tr>
<td>Marine Filter**</td>
<td>9PXMF3KI</td>
</tr>
</tbody>
</table>

---

*All 9PX UPS and EBM are delivered with rack kit

**Marine UPS requires Marine filter (EMC) for IEC/EN 60945 compliance
Unique Hot Sync wireless paralleling for building n+1 systems with several UPS units

Eaton 9PHD Marine UPS

**Easy deployment for optimizing installation costs**
- Front access for installation and service
- Cabinet supports use of halogen free cables, double cables and large cables for installation
- Lifting lugs included for easier unit handling during installation
- Suitable for 3-wire and 4-wire networks and voltage range 380V-480V without transformers
- Small footprint due compact power electronics and internal transformer options

**Designed for marine and offshore environments**
- Marine certificate from any marine classification society
- Marine vibration tested units
- Halogen free cables
- IP23 protection
- Conformally coated PCB boards
- Cable area designed to support marine cabling practices
- Vibration dampers and installation brackets for floor and wall
- Door handle, stopper and triangle key included

**Smart technology for minimizing operating costs**
- The 9PHD UPS sets new standards with an operating efficiency level up to 97% in double conversion mode
- > 99% superior efficiency is delivered in Energy Saver System mode (ESS)
- Power factor 1 increases unit power by 10-20% compared to average UPS

**Smart technology for maximizing reliability**
- Large touch screen display for easy operation and reduced risk of human error
- Modular design allows building fault tolerant N+1 units
- Redundant monitored cooling fans in each power module
- Battery start feature

**Strong design for demanding environments**
- Protection against dirt, dust, water and moisture with cover options up to IP54
- 1.5mm cover plates for robust use
- Protection for touch screen display
## Eaton 9PHD Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UPS output power rating (1.0 p.f.)</strong></td>
<td>30, 40, 50, 80, 100, 120, 150, 160, 200 kW</td>
</tr>
<tr>
<td><strong>Efficiency in double conversion mode</strong></td>
<td>Up to 97%</td>
</tr>
<tr>
<td><strong>Efficiency in Energy Saver System (ESS)</strong></td>
<td>&gt; 99%</td>
</tr>
<tr>
<td><strong>Inverter/rectifier topology</strong></td>
<td>Transformer-free IGBT with PWM</td>
</tr>
<tr>
<td><strong>Audible noise</strong></td>
<td>30–50 kW: &lt; 60 dBA</td>
</tr>
<tr>
<td></td>
<td>30–50 kW: &lt; 65 dBA</td>
</tr>
<tr>
<td></td>
<td>ESS operation: &lt; 47 dBA</td>
</tr>
<tr>
<td><strong>Ambient temperature</strong></td>
<td>0°C to 45°C at sea level, higher temperatures are optional</td>
</tr>
<tr>
<td><strong>Ingress protection</strong></td>
<td>IP23, Optional: IP33/IP54</td>
</tr>
<tr>
<td><strong>Input</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Input wiring</strong></td>
<td>3ph + N + PE / 3ph + PE</td>
</tr>
<tr>
<td><strong>Nominal voltage rating (configurable)</strong></td>
<td>380 V-480 V, 50/60 Hz</td>
</tr>
<tr>
<td><strong>With optional transformer</strong></td>
<td>380 V-690 V, 50/60 Hz</td>
</tr>
<tr>
<td><strong>Input voltage range</strong></td>
<td>Rectifier input + 20%, if voltage &gt; 440 V +10%</td>
</tr>
<tr>
<td></td>
<td>Low -15% at 100% load, -40% at 50% load without battery discharge</td>
</tr>
<tr>
<td></td>
<td>Bypass +10% - (-15%)</td>
</tr>
<tr>
<td><strong>Input frequency range</strong></td>
<td>40-72 Hz</td>
</tr>
<tr>
<td><strong>Input Power Factor</strong></td>
<td>0.99</td>
</tr>
<tr>
<td><strong>Input ITHD</strong></td>
<td>30 kW: &lt; 4.5%</td>
</tr>
<tr>
<td></td>
<td>40-200 kW: &lt; 3%</td>
</tr>
<tr>
<td><strong>Soft start capability</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Internal backfeed protection</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Output wiring</strong></td>
<td>3ph + N + PE/ 3ph + PE</td>
</tr>
<tr>
<td><strong>Nominal voltage rating (configurable)</strong></td>
<td>380 V-480 V, 50/60 Hz</td>
</tr>
<tr>
<td><strong>With optional transformer</strong></td>
<td>380 V-690 V, 50/60 Hz</td>
</tr>
<tr>
<td><strong>Output UTHD</strong></td>
<td>&lt; 1% (100% linear load)</td>
</tr>
<tr>
<td></td>
<td>&lt; 5% (reference non-linear load)</td>
</tr>
<tr>
<td><strong>Rated output power factor</strong></td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Permitted load power factor</strong></td>
<td>0.8 lagging - 0.8 leading</td>
</tr>
<tr>
<td><strong>Overload on inverter</strong></td>
<td>10 min 102-110%;</td>
</tr>
<tr>
<td></td>
<td>60 sec 111-125%;</td>
</tr>
<tr>
<td></td>
<td>10 sec 126-150%</td>
</tr>
<tr>
<td></td>
<td>300 ms &gt; 150%</td>
</tr>
<tr>
<td></td>
<td>On battery mode 300 ms &gt; 126%</td>
</tr>
<tr>
<td><strong>Overload when bypass available</strong></td>
<td>Continuous &lt; 125%, 10 ms 1000% (Note: Bypass fuses may limit the overload capability)</td>
</tr>
<tr>
<td><strong>Communications</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MiniSlot</strong></td>
<td>4 communication bays</td>
</tr>
<tr>
<td><strong>Serial ports</strong></td>
<td>Built-in host and device USB</td>
</tr>
<tr>
<td><strong>Relay inputs/outputs</strong></td>
<td>5 relay inputs and dedicated EPO</td>
</tr>
<tr>
<td></td>
<td>1 relay output</td>
</tr>
<tr>
<td><strong>Compliance with standards</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Safety (ICB certified)</strong></td>
<td>IEC 62040-1</td>
</tr>
<tr>
<td></td>
<td>Marine class certificates are available from any class example: DNV, ABS, Lloyd's Register, BV, Lloyds Veritas etc</td>
</tr>
<tr>
<td><strong>EMC</strong></td>
<td>IEC 62040-2</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>IEC 62040-3</td>
</tr>
<tr>
<td><strong>Battery</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Battery type</strong></td>
<td>VRLA, Ni-Cd</td>
</tr>
<tr>
<td><strong>Charging method</strong></td>
<td>ABM technology or Float</td>
</tr>
<tr>
<td><strong>Temperature compensation</strong></td>
<td>Optional</td>
</tr>
<tr>
<td><strong>Battery nominal voltage (VRLA)</strong></td>
<td>From 432 V (36 x 12 V, 216 cells) to 480 V (40 x 12 V, 240 cells)</td>
</tr>
<tr>
<td></td>
<td>(Note: Strings with different battery voltage may not be paralleled)</td>
</tr>
<tr>
<td><strong>Charging current maximum</strong></td>
<td>30–50 kW 29.3 A</td>
</tr>
<tr>
<td></td>
<td>80–100 kW 58.6 A</td>
</tr>
<tr>
<td></td>
<td>120–150 kW 87.9 A</td>
</tr>
<tr>
<td></td>
<td>160–200 kW 117.2 A</td>
</tr>
<tr>
<td><strong>Battery start capability</strong></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>* when load level ≤ 40 kW/UPM</td>
</tr>
</tbody>
</table>
Intelligent Power® Distribution

Basic ePDU
Designed for reliable and cost effective power distribution, Basic ePDUs have the form factor and outlet choices to meet your needs.

Designed for the Data Centre: All ePDUs, including basic ePDUs, are made of rugged aluminium or steel chassis and incorporate fully shrouded circuit breakers and switches, they are designed to be highly reliable, and designed to last.

Transfer Switch
The STS source transfer switch is a simple and effective solution to manage the redundancy provided by two independent power sources. STS handles the automatic or manual transfer of your loads between two independent power sources without interrupting the supply of power (< 6 milliseconds). Either of the two sources may be designated as the preferred source with the other becoming the alternate source. In the event of a failure, transfer from one to the other is automatic and instantaneous.

Monitored ePDU
Monitored ePDUs monitor the current draw to allow for provisioning and load balancing of servers, and to ensure current draw is not approaching breaker limits.
- Monitoring: Monitor current on input and each branch circuit to ensure accurate load balancing
- Control: Monitor and measure remotely over Ethernet or via LED interface on unit

Advanced Monitored ePDU
Advanced Monitored ePDUs give the data centre manager the detailed information and understanding they need to efficiently and effectively run their data centre
- Monitoring: Highly accurate individual outlet monitoring, branch circuit monitoring and the ePDU as a whole, for V, W, A and kWhrs. Also monitor temperature and humidity in the rack via optional sensors
- Control: Monitor and measure key properties and alerts remotely over Ethernet or via Advanced LCD screen on the unit. Communication protocols include HTTP / HTTPS, DHCP, SNMP v1 and v3, SNTP, SMTP, Telnet, IPv4 & IPv6

Switched ePDU
Switched ePDUs give control to the Data Centre manager – be able to remotely shut off or restart equipment, and ensure that it starts up in the correct sequence with the correct delays.
- Switching: on and off control of individual outlets, together with cycling and sequencing of outlets, branch circuits and the ePDU as a whole
- Monitoring: Highly accurate monitoring of the ePDU as a whole for V, W, A and kWhr. Also monitor temperature and humidity in the rack via optional sensors
- Control: Monitor over Ethernet or via Advanced LCD screen on the unit, control via Ethernet. Communication protocols include HTTP / HTTPS, DHCP, SNMP v1 and v3, SNTP, SMTP, Telnet, IPv4 & IPv6

Managed ePDU
Managed ePDUs offer the data centre managers the maximum functionality – fully Intelligent Power distribution for – complete understanding and control, of Data Centre power distribution, including:
- Monitoring: highly accurate individual outlet, branch circuit, and full ePDU monitoring for V, W, A and kWhrs. Also monitor temperature and humidity in the rack via optional sensors
- Switching: individual outlet, sequencing of outlets with delays or cycling enables remote reboot of equipment
- Control: Monitor and control remotely over Ethernet and via Advanced LCD screen on the unit. Communication protocols include HTTP / HTTPS, DHCP, SNMP v1 and v3, SNTP, SMTP, Telnet, IPv4 & IPv6

Maximise your available power
- Utilise all available power, through Intelligent Power® monitoring

Ensure you have the power you need, where you need it
- Combinations of IEC C13, C19 and local sockets
- Manage your moves and changes in the data centre and redistribute your power
- Know what power is available for you to add servers or capacity, or if you are reaching capacity

Maximum availability
- Designed for the data centre environment and to fit in any industry standard rack
- Rugged Aluminium chassis, with multiple mounting options
- Available in 0U Vertical, and 1U or 2U horizontal options
- High quality components and state-of-the-art technology and circuitry

Manage your power consumption
- Control your operating costs by monitoring and tracking consumption from rack to branch, right down to the individual server
- Easily identify physical branch sections and related breakers through Colour-coded sections
- Accurate V, A and kWhr measurement enables analysis and tracking
- Enables you to see what your servers are doing
- Complete control and understanding
- Control your power distribution and consumption
- Build knowledge base of what is going on
- Switch, sequence outlets and outlet groups as well as individually monitor – you have complete control
PDU and Maintenance Bypass

Eaton FlexPDU, Eaton HotSwap MBP

The no hassle solution for improving availability and adding flexibility for single phase UPSs.

**Eaton FlexPDU**

Having the right connectors just where you need them
- FlexPDUs (Power Distribution Units) are flexible mounting multiway socket blocks for easy connection of multiple loads either as free-standing or on rack-mounted UPSs
- FlexPDUs have a large number of sockets (3x3 pin ANZ outlets, 12 IEC 10 A sockets) which fit into a very compact unit (1U - 19")
- FlexPDUs are easy to implement into any type of installation: they can be rack mounted horizontally (1U) or vertically or directly onto all Eaton RT format (rack/tower) UPSs

**Eaton HotSwap MBP**

- High availability for all UPSs up to 11 kVA.
- HotSwap MBP provides a maintenance bypass for all UPSs. UPSs can be hot swapped or upgraded without interrupting the power supply.
- HotSwap MBP are available with multiple power ratings: 3000 VA, 6000 VA, 11000 VA, 11000 VA (3 ph Input).
- HotSwap MBP provides compatibility with any UPS now and in the future from Eaton or any other supplier
- The HotSwap MBP 3000 VA is available with different output connectors: 3x3 pin ANZ outlets, IEC or terminal blocks (Hard-Wired version). When used with a 9PX or 9SX the HotSwap MBP 6000 VA and above are providing information on the Bypass status through the UPS LCD screen.
- HotSwap MBP units can be installed as required; at the back, side, top of the UPSs, or rack-mounted.

---

### Technical Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Eaton FlexPDU</th>
<th>Eaton HotSwap MBP 3000</th>
<th>Eaton HotSwap MBP 6000</th>
<th>Eaton HotSwap MBP 11000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum power</td>
<td>3000 VA</td>
<td>3000 VA</td>
<td>6000 VA</td>
<td>11000 VA</td>
</tr>
<tr>
<td>Installation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installation</td>
<td>19“ rack, wall mounting or on Eaton RT UPSs</td>
<td>19“ rack, wall mounting or on Eaton 9PX/SX UPSs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>44 x 483 x 80 mm</td>
<td>52 x 483 x 120 mm</td>
<td>52 x 483 x 120 mm</td>
<td>89 x 483 x 90 mm</td>
</tr>
<tr>
<td>Connection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inputs</td>
<td>1 IEC C20 (16 A) connector and 2 cables (1 IEC 16 A - 16 A cable and 1 IEC 10 A - 16 A cable) for connection to any UPS</td>
<td>IEC models: 1 IEC C20 (16 A) connector and 1 IEC 16 A - 16 A cable (1 HW (Hard-Wired): terminal block</td>
<td>Hardwired terminal block</td>
<td>Hardwired terminal block</td>
</tr>
</tbody>
</table>
| Outputs                                     | 12 IEC 10 A outlets + 1 IEC 16 A outlet (with 2 circuit breakers) | 6 IEC sockets + 1 IEC 16 A sockets (with 1 circuit breaker) OR 3 IEC 10 A outlets + 1 IEC 16 A outlet | 3 IEC 10 A outlets + 2 IEC 16 A outlets (with 3 circuit breakers) + Terminal blocks * | 4 IEC 16 A outlets (with 4 circuit breakers) + Terminal blocks *
| IEC                                          |               |                        |                        |                        |
| HW                                          | NA            | Terminal block         |                        |                        |
| Cascading                                   | Yes, IEC 16 A output outlet |                        |                        |                        |
| Retaining clips                             | Retaining clips on the IEC output outlets |                        |                        |                        |
| Operating conditions and approvals          |               |                        |                        |                        |
| Operating temperature                       | 0°C to 45°C continuous | 0°C to 40°C continuous |                        |                        |
| Approvals                                   | CE            |                        |                        |                        |

1: Use cable kits M68440 a low power UPS <2.2 kVA (with IEC 10 A outputs) - see below.
Eaton offers multiple RE Series configurations, making it easy to choose the solution that best fits your needs. These include solutions for server, networking and colocation installations. Through its high-quality and flexible design, the RE Series Enclosure minimizes installation time and reduces costs while serving as the foundation of a complete data center infrastructure solution.

As more companies shift mission-critical IT systems to virtualized infrastructures, data center professionals face increasing pressure to consolidate resources and lower costs. The RE Series Enclosure meets these challenges by providing flexible configurations across a range of environments, from network closets to Data Centers.

**Save time**
- ePDU and cable management mounting support tool-less installation of full or half-height 0U ePDUs.
- Toolless ePDU mounting
- Fast installation for all Eaton 0U ePDUs
- Fully Configured Enclosures Save time installing accessories with pre-installed rack options
- Easy Access to Equipment Split side panels offer greater access and easy removal

**Save money**
- With cable and airflow management options available in each RE Series configuration, you can save money on heating and cooling costs, as well as cable management accessories.
- In-field Modification
- A wide-range of cable, airflow management and top panel options allow you to configure each rack in-field.
- Configured Enclosures
- Create your own configuration to the exact specifications of your applications.
- Bundled Solutions
- Minimize data center cost by purchasing the full Eaton power and enclosure system.

**Reduce Risk**
- The highly secure combination lock protects valuable IT resources from internal and external threats.
- High load capacity and airflow ensures maximum equipment performance and safety.
- Key & Combo Lock
- Standard handle offers single and 3-point locking options.
- High-flow doors
- Front doors feature a 78% open perforation pattern for max air intake and exhaust.
- High Load Capacity
- Enhanced structural stability with 1500kg static rating (Server Racks).

### RE Series Enclosure Technical Specifications

<table>
<thead>
<tr>
<th>Product</th>
<th>Application</th>
<th>Dimension</th>
<th>Configuration</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Server</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Server Enclosure</td>
<td>Server (1500kg)</td>
<td>H (RMU) = 42 or 48</td>
<td>Frame, rails (flush), locking sides, casters, top, full front door with swing handle, split rear doors with swing handle, PDU brackets</td>
<td>Black or white</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W (mm) = 600, 800</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D (mm) = 870, 1070, 1170, 1200</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Networking</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network Enclosure</td>
<td>Network (800kg)</td>
<td>H (RMU) = 24 or 42U</td>
<td>Frame, rails, locking sides, casters, top, full front door with swing handle, split rear door with swing handle, PDU brackets</td>
<td>Black or white</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W (mm) = 600, 800</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D (mm) = 800, 1000, 1100, 1200</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Colocation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colocation Enclosure</td>
<td>Colocation (1500kg)</td>
<td>H (RMU) = 42 or 48U</td>
<td>Frame, rails, locking sides, casters, top, full front door with combo lock, split rear door with combo lock, PDU brackets</td>
<td>Black or white</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W (mm) = 600, 800</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D (mm) = 1070, 1170, 1200</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Key Accessories</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Dams</td>
<td>800mmW Enclosures</td>
<td>H = 42 or 48U</td>
<td>Air dam with blanking panels and grommets</td>
<td>Black or white</td>
</tr>
<tr>
<td>PDU Brackets</td>
<td>All Enclosures</td>
<td>H = 24, 42 or 48U</td>
<td>Additional PDU brackets for mounting on second side or for half height rack PDUs</td>
<td>Black</td>
</tr>
<tr>
<td>Vert. Cable Mgr</td>
<td>800mmW Enclosures</td>
<td>H = 42 or 48U</td>
<td>Cable rings, high density cable managers</td>
<td>Black</td>
</tr>
<tr>
<td>Horiz. Cable Mgr</td>
<td>All Enclosures</td>
<td>19”W, 1U, 2U</td>
<td>Cable rings, high density cable managers</td>
<td>Black</td>
</tr>
<tr>
<td>Shelving</td>
<td>All Enclosures</td>
<td>D = 600mm, 800mm, 1000mm</td>
<td>Fixed, Telescopic</td>
<td>Black</td>
</tr>
<tr>
<td>Fan Tray</td>
<td>Network Enclosures</td>
<td>D = 800mm, 1000mm, 1100mm</td>
<td>4-6 Fans per kit</td>
<td>Black</td>
</tr>
<tr>
<td>Bottom Plate</td>
<td>Server Enclosures</td>
<td>W = 600mm, 800mm</td>
<td>Steel, fully contained</td>
<td>Black</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D = 1100mm, 1200mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blanking Panel</td>
<td>All Enclosures</td>
<td>1U, 2U, 3U, 4U</td>
<td>Tool-less metal, Tool-less plastic</td>
<td>Black</td>
</tr>
</tbody>
</table>
DC Product Solutions
Smarter energy. Smarter solutions

Eaton offers highly efficient, highly reliable, modular DC power systems, with built-in redundancy and secure, always on-line, battery backup. Our smaller compact DC solutions are well suited to rack mount indoor and outdoor enclosures and other space limited installations. Expert advice is available on the system that will best suit your needs, from small and medium private enterprise DC power systems, through to any situation in a large-scale core Telecom network or Industrial facility. We can also provide support with alternative energy solutions such as off grid solar and hybrid solar/diesel power sources. Eaton DC systems feature advanced remote monitoring & control, and we have available complimentary sealed lead acid batteries.

- **Rectifier Module** 24V & 48V, 0.9kW to 5.8kW
- **Solar Charger Module** 48V, 2kW
- **Inverter Modules** 48V > 110V & 230V, 1.0kVA to 3.5kVA
- **DC-DC Converters** 12V, 24V, 48V, 0.5kW
- **Rectifier Systems** 48V, 0.9kW to 384kW
  - 24V, 1.4kW to 179kW
- **Inverter Systems** 48V > 110V, 230V 2kVA standalone
  - 48V > 110V, 230V 18kVA, modular
  - 48V > 230V 35kVA, modular
- **Solar Systems** 48V, 24kW
- **Sealed LA Batteries** 12V, 55Ah, 100Ah, 150Ah FT
- **Outdoor Enclosures** Single & Double Bay. Power + Equip HEX, DX, Forced Air
Intelligent Power® Software Suite

Eaton is dedicated to making your work life easier by providing the tools you need to manage your power infrastructure all from your VMware® vCenter dashboard or vRealize Operations Manager platform.

How Eaton fits into the virtual landscape

Eaton’s Intelligent Power Manager (IPM) software is certified as VMware ready and simplifies power management by providing the needed tools to monitor and manage power devices in virtual environments. Seamlessly integrating into VMware’s vCenter server and vRealize Operations Manager, IPM ensures system uptime and data integrity by allowing you to remotely monitor, manage and control devices on your network from a single interface.

IPM adds value to your virtualized environment by allowing you to:

- Increase productivity with easy set up and integration into vCenter
- Prevent downtime by taking action on real-time notifications of power and environmental events
- Avoid data loss by initiating Site Recovery Manager
- Simplify data center operation through validated integration with VMware all within a single pane of glass

Intelligent Power Manager supervisory software lets you monitor and manage multiple power and environmental devices across the network from a single interface, giving you up-to-the-minute information on the status of power in your network. It also works seamlessly with VMware’s vCenter Server™ and vMotion™ as well as Microsoft’s SCVMM™ and Live Migration.

- Monitor and manage multiple power and environmental devices from any Internet browser or your vCenter dashboard
- Auto discovery provides fast installation by automatically detecting devices on the network
- Mass-upgrading of firmware capability reduces network management card setup and maintenance time
- Shutdown agent management enables safe shut down of servers
- Multiple password-protected access levels and support for secure communications
- All the functionality of an enterprise-class monitoring solution for free or at a fraction of the cost
- Support for up to 10 devices included at no charge; additional capacity may be purchased

Use each software independently or as a powerful combination. Together with your UPS, they provide end-to-end power management for maximum uptime and data integrity.

Intelligent Power Protector and UPS Companion protection software provides graceful, automatic shutdown of network devices during a prolonged power disruption, preventing data loss and saving work-in-progress. As part of Eaton’s power network management system, these two applications work together to deliver comprehensive power management and protection.

- Helps you avoid data loss by gracefully shutting down computers and virtual machines/servers powered by an Eaton UPS during an extended power outage
- Easy-to-use interface from any PC with a Web browser
- Acquires UPS information through local or network communication and can be easily deployed on many computers
- Can be remotely managed, configured and updated with Eaton’s Intelligent Power Manager
- Can communicate with the protected device directly (via USB) or through the network (via Web/SNMP card)
Power management

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• Simplify data center operation through validated integration with VMware all within a single pane of glass

Why being VMware ready is important
VMware Ready products and solutions interoperate seamlessly with a virtual infrastructure and have met specific VMware integration and interoperability standards. Since IPM is VMware ready that means it integrates quickly and you know it will work.

Software-defined data center and vRealize Operations Manager
Eaton's Infrastructure Management Pack—downloadable for free at Eaton.com/vRealize—allows you to monitor and manage the health, risk and efficiency of your facility infrastructure by plugging IPM into vRealize Operations Manager. Additionally, you can take advantage of the robust vRealize Operations Manager predictive analytics to assess the upcoming risks associated with your power and environment.
• Manage health, risk and efficiency of power and environmental devices
• View remaining battery capacity to ensure system uptime
• Monitor temperature of racks to take action before overheating occurs
• Receive early notifications to prevent overload

Manage power from your vCenter dashboard
IPM integrates into VMware's vCenter Server™ virtualization management solution, letting you manage power to your virtualized environment through the vCenter web client and dashboard. This easy-to-set-up solution provides a complete view of your power devices all from the vCenter dashboard you’re already using.
IPM's flexibility of grouping virtual machines allows you to shutdown, suspend, power on/off and migrate individual or groups of VMs providing a fully customizable virtual environment.
Options to manage and monitor your UPS

Network Management Cards
Network Card-MS and ConnectUPS Web/SNMP cards are a complete UPS monitoring, control and shutdown solution in a networked IT environment. In case of alert the Web/SNMP card can notify users and administrators through e-mail and SNMP traps. In case of a prolonged power failure the protected computer systems can be shut down in a graceful manner with Intelligent Power software. The unique three-port switching hub on the X-Slot model provides additional network connections.

Industrial Network Cards
Network & Modbus Card-MS and X-Slot Modbus cards connect the UPS to industrial and building management systems using ModBus RTU protocol.

Power Xpert Cards
Power Xpert Gateway cards provide Web-enabled, real-time monitoring of Eaton UPSs and PDUs through standard onboard Web pages, Power Xpert Software or third-party software. As an integral part of the Power Xpert Architecture, the cards provide a central point to connect UPS and PDUs to an Ethernet network via an X-Slot communication bay.

Relay Cards
Relay Card-MS, Minislot Industrial Relay Card X-Slot Relay cards are an easy connection to IBM AS/400 series computers as well as industrial and building management systems.

Other devices
Environmental Monitoring Probe (EMP)
Environmental Monitoring Probe (EMP) adds temperature, humidity and two contact closure monitoring capability to Network Management Cards and Power Xpert Cards. It is especially well suited for monitoring rack temperature and door status. Operating system shutdown can be triggered if user defined thresholds are exceeded or contact closure status changes.

Eaton UPS status indicator panel
The UPS Status Indicator (UPSSI) has been specifically designed to provide remote indication of the UPS Status in a medical environment and is suitable for installation in Operating theatres, Intensive care, Recovery wards, Isolation rooms, Nursing stations, Treatment rooms, and other Special care areas. The equipment is suitable for wall mounting in a standard Australian electrical accessory bracket.
Surge protection devices

In nanoseconds a power surge can do major damage to sensitive equipment and data. It can come from anywhere, and like a bullet, you only know it has been by the destruction left behind. That’s why surge protection is so critical. And why Eaton builds so much quality into our full line of surge protection products. Eaton has a world beating reputation for Power Quality and a full range of surge protection solutions, covering every eventuality.

- **Eaton SPD60/T60**
  Shunt Surge Diverter, 1 Pole 60kA

- **Eaton SPDi**
  Shunt Surge Diverter, 1 and 3 Phase, 40kA and 100kA

- **Eaton SPD3200**
  Shunt Surge Diverter, 3 Phase 200kA

- **Eaton DSFi**
  Series Filter with Shunt Surge Diverter, 1 Phase 5-32A, 40kA Primary

- **Eaton CSFi**
  Series Filter with Shunt Surge Diverter, 1 Phase 3-25A, 25kA Primary

- **Eaton PPFi**
  Series Power and Noise Filter with Shunt Surge Diverter 3 Phase, 100-800A, 80-240kA

- **Eaton Quickmov™**
  Integrated Surge Protection Device (Internally HRC Fused) 1 Pole 60kA

- **Eaton ESFi**
  Series filter with Shunt Surge Diverter Class II/Cat C & B, 1 & 3 Phase 63-80A, 100kA Series Surge Filters

- **Eaton PSFi**
  Portable Surge Filter, 1 Phase 10A & 16A, 25kA Primary and 140kA Primary

- **Eaton SF8RM**
  Single Phase Rack Mounted Filter /PDU
Support: Tools and programs available

**Power Quality Sales Web**

PQ Salesweb is a password-protected website that contains Power Quality product information for Eaton channel partners of Eaton’s power quality product portfolio. The website has news, product information, marketing and sales tools you can benefit from in your daily Eaton sales.

To register go to website www.pqsalesweb.eaton.com
Access is granted upon approval of registration.

**Eaton’s PowerAdvantage rewards program**

Bigger rewards. Better support.
Eaton’s PowerAdvantage rewards program is an easy to use points based program which gives you access to a selection of over 3,000 fantastic products and experiences.

How does it work?
It’s easy. The more Eaton products you sell, the more points you earn and the closer you get to some great rewards!
For more information once registered, login to https://powerquality.eaton.com/pp/MyAccount.asp click on Eaton Salesweb and then rewards program quicklink to access website.

To register go to website www.powerquality.eaton.com and click on icon
Please allow some time for your access to be granted

**ANZ Designer Tool-kit**

Eaton’s Designer Tool-Kit is a valuable online resource for consultants where you’ll find specifications for our Electrical Power Quality equipment. If you’re running a project based around one of our UPS systems, our Designer Tool-Kit will help you plan it.

To register go to website www.powerquality.eaton.com click on icon
Snapshot of 2016 reported outages in:

**Australia**
- **2,635,666** people affected
- **257** power outages
- **46% increase in power outages from 2015**
  - NT: 46% increase
  - SA: 36% increase
  - TAS: 44% increase
  - ACT: 14% increase
  - VIC: 17% increase
  - WA: 31% increase
  - QLD: 21% increase
  - NSW: 16% increase
- **Total duration of outages**: 10,283 minutes

**New Zealand**
- **348,503** people affected
- **125** power outages
- **47% increase in power outages from 2015**
  - North: 31% increase
  - South: 45% increase
- **Total duration of outages**:
  - North: 2.2 days
  - South: 2.2 days
  - Average duration of outage:
    - North: 60 minutes
    - South: 65 minutes
  - Average number of people affected by outage:
    - North: 2,851
    - South: 2,476
- **Total duration of outages**: 6104 minutes

**increase in power outages from 2015**
- NT: 46% increase
- SA: 36% increase
- TAS: 44% increase
- ACT: 14% increase
- VIC: 17% increase
- WA: 31% increase
- QLD: 21% increase
- NSW: 16% increase
- **Total duration of outages**: 10,283 minutes

**North vs South**
- **Increase in power outages from 2015**
  - North: 31% increase
  - South: 45% increase
- **Total duration of outages**
  - Average duration of outage:
    - North: 60 minutes
    - South: 65 minutes
  - Average number of people affected by outage:
    - North: 2,851
    - South: 2,476
- **Total duration of outages**: 6104 minutes
Every day, people depend on things like technology, transportation, energy and infrastructure to keep their daily lives on track. But without power, none of it would be possible. That’s why companies around the world turn to Eaton. We’re dedicated to improving people’s lives and the environment with innovative technologies that help manage power more safely, reliably and sustainably. To meet today’s challenges, and tomorrow’s. Because this is what really matters. And we’re here to make sure it works.

To learn more go to: Eaton.com/whatmatters