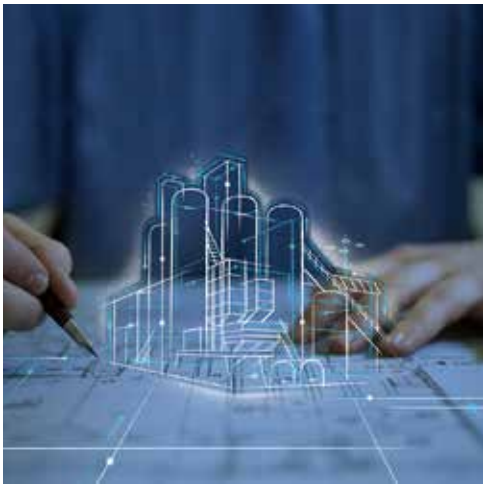
Power Quality Product Catalogue
Australia and New Zealand

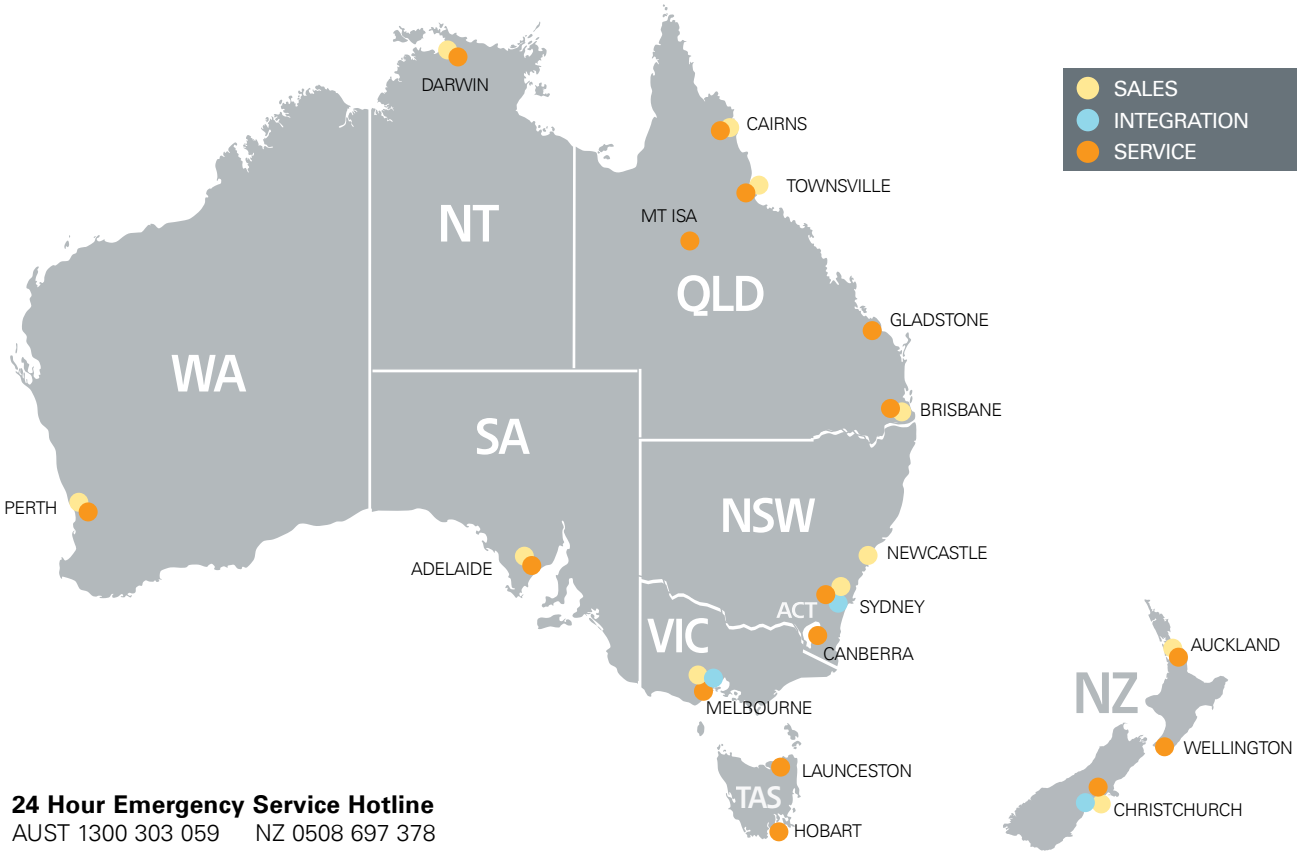
Back-up and Power Protection products




EATON
Powering Business Worldwide

Eaton ANZ support footprint





24 Hour Emergency Service Hotline
AUST 1300 303 059 NZ 0508 697 378

Contents

UPS SELECTOR GUIDE

3 SERIES STANDBY UPS

Extended Service Plans (ESP) Available

3S	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	Form	Comms	Warranty	Applications
	3S550AU	550/330	(6) AUS 3 pin 10A	Fixed line cord 3 pin 10A AUS	Fixed line cord 3 pin 10A AUS	Power Board	USB	2 years	
	3S700AU	700/420							

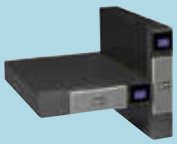
5 SERIES LINE-INTERACTIVE UPS

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

5E	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	Form	Comms	Warranty	Applications
	5E650IUSB-AU	650/360	(2) AUS 3 pin 10A	Fixed line cord 3 pin 10A AUS	USB	Tower	USB	2 years	
	5E850IUSB-AU	850/480	(2) AUS 3 pin 10A						
	5E1100IUSB-AU	1100/660	(3) AUS 3 pin 10A						
	5E1500IUSB-AU	1500/900	(3) AUS 3 pin 10A						
	5E2000IUSB-AU	2000/1200	(3) AUS 3 pin 10A						

5S	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	Form	Comms	Warranty	Applications
	5S550AU	550VA/330W	(6) AUS 3 pin 10A	Fixed line cord 3 pin 10A AUS	USB	Tower	USB	2 years	
	5S700AU	700VA/420W							
	5S850AU	850VA/510W							
	5S1200AU	1200VA/750W							
	5S1600AU	1600VA/1000W							

5P	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	Form	Comms	Warranty	Applications
	5P650AU (T)	650/420	Tower: (2) AUS 3 pin 10A - Remotely controlled (3) IEC C13 10A Rack: 650VA & 850VA (4) IEC C13 10A (2) Remotely controlled 1150VA & 1550VA (6) IEC C13 10A (3) Remotely controlled	Tower: Fixed line cord 3 pin 10A AUS Rack: IEC C14 10A	Tower: USB Serial Rack: (2) IEC 10A jumper USB Serial	Tower/ Rack	USB/RS232/ Minislot	3 years	
	5P650iR (R)								
	5P850AU (T)	850/600							
	5P850iR (R)								
	5P1150AU (T)	1150/770							
	5P1150iR (R)								
	5P1550AU (T)	1550/1100							
	5P1550iR (R)								

5PX	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	EBM	Form	Comms	Warranty	Applications
	5PX1500iRT	1500/1350	(8) IEC C13 10A (4) Remotely controlled	IEC C14 10A	(2) IEC 10A jumper USB Serial	Yes (4)	Rack/ Tower	USB/ RS232/ Minislot	3 years	
	5PX2000iRT	2000/1800								
	5PX2200iRT	2200/1980	(8) IEC C13 10A (4) Remotely controlled (1) IEC C19 16A	IEC C20 16A	15A AUS-IEC input (3kVA only) (2) IEC 10A jumper USB Serial					
	5PX3000iRT2UAU	3000/2700	(8) IEC C13 10A (4) Remotely controlled (1) IEC C19 16A							
	5PX3000iRT3UAU*									

POWER *ADVANTAGE* Rewards Progarm

Become an Eaton Partner and start enjoying the benefits. Sign up today by visiting:
www.powerquality.eaton.com/australia/

Simplify

From Desktop to Datacentre

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

Essential | Superior | Premier

Innovate

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.

Simplify, Innovate & Connect with Eaton

9 SERIES ONLINE UPS

Compatible Racks, ePDU's, Software & Services Available

9E	Part Number	VA/Watts	Outlet type	Input	Cables	EBM	Form	Comms	Warranty	Applications
	9E6KI	6000/4800	HW	HW	USB	Yes	Tower	USB	1 year	CCTV, GATES, SERVERS, STORAGE
	9E10KI	10000/8000								
	9E10KIXL	10000/8000								
	9E15KI	15000/12000								
	9E20KI	20000/16000								
	9E20KIXL	20000/16000								

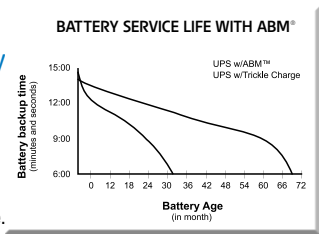
9130 Tower	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	EBM	Form	Comms	Warranty	Applications
	PW9130G700T-XLAU	700/630	(4) AUS 3 Pin 10A	IEC C14 10A	USB	Yes	Tower	USB/ RS232/ Relay/ Minislot	2 years	CCTV, GATES, SERVERS, STORAGE, POS
	PW9130G1000T-XLAU	1000/900	(4) AUS 3 Pin 10A	IEC C14 10A						
	PW9130G1500T-XLAU	1500/1350	(4) AUS 3 Pin 10A	IEC C14 10A						
	PW9130G2000T-XLAU	2000/1800	(1) IEC C13 10A (5) AUS 3 pin 10A	IEC C14 10A						
	PW9130G3000T-XLAU	3000/2700	(1) IEC C19 16A (5) AUS 3 Pin 16A	IEC C20 16A						
	PW9130G6000T-XLAU	6000/5400	HW	HW						

9PX Rack/Tower	Part Number	VA/Watts	Outlet type	Input	Cables	EBM	Form	Comms	Warranty	Applications
	9PX1000IRT2UANZ	1000/1000	8 x IEC C13(10A)	IEC C14 10A	USB Serial Ext. Batt Comms cable	Yes (4)	Tower / Rack	USB / RS232 / Remote On/Off, Remote Power Off / Output Relay	3 years	CCTV, GATES, SERVERS, STORAGE, POS
	9PX1500IRT2UANZ	1500/1500	8 x IEC C13(10A)	IEC C14 10A						
	9PX2000iRTAU	2000/1800	6 x IEC C13(10A) + 2 x AUS GPO (10A)	IEC C14 10A						
	9PX2200IRT2UANZ	2200/2200	8 x IEC13(10A) + 2 x IEC C19 (16A)	IEC C20 16A						
	9PX2200IRT3UANZ	2200/2200	8 x IEC13(10A) + 2 x IEC C19 (16A)	IEC C20 16A						
	9PX3000IRT2UANZ	3000/3000	8 x IEC13(10A) + 2 x IEC C19 (16A)	IEC C20 16A		Yes (4)				
	9PX3000IRT3UANZ	3000/3000	8 x IEC13(10A) + 2 x IEC C19 (16A)	IEC C20 16A						

9PX	Part Number	kVA/kW	Outlet Qty & Type	Input	Cables	EBM	Form	Comms	Warranty	Applications
	9PX5Ki	5000/4500	HW (2) IEC C19 (8) IEC C13	HW	USB Serial Cable retention bracket (6kVA)	Yes (4)	Rack/ Tower	USB/RELAY/ RS232/ Minislot DB9 (4) Dry Contacts / DB15 Parallel	3 years	CCTV, GATES, SERVERS, STORAGE, POS
	9PX6Ki	6000/5400								
	9PX8KiPM + 9PXEBM240	8000/7200	HW HW + (4) IEC C19 16A with optional MBP			Yes (12) (with supercharger module)				
	9PX11KiPM + 9PXEBM240	11000/10000								

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.

- Select a UPS
- Become an Eaton Partner
- Find a Reseller
- Register a Product (Warranty)
- Download Software, Drivers & Firmware
- Designer Tool-Kit
- Order a Catalogue

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'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.

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

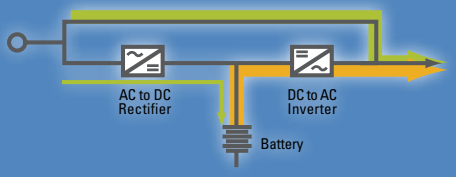
Eaton's power management solutions are based on protecting the nine most common power problems present in any environment. This unique approach makes your product selection decisions about power protection much simpler. The nine power problems listed below are potentially harmful to both your data and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

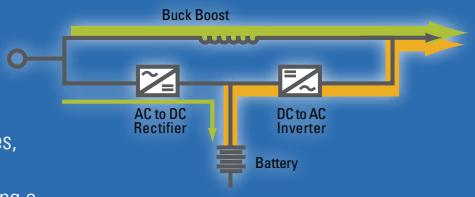
Within each Series, Eaton has created 3 classes of products; to provide "Good, Better and Best" levels of features and performance and enable the best product fit for any application and budget.

Series 3 Standby UPS: Backup power



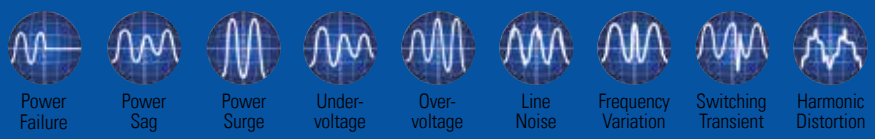
The Eaton's series 3 UPS primarily protects against three of the nine power problems including power failures, power sags and power surges. This essential, cost-effective protection is necessary in order to prevent damage such as data loss, file corruption, hardware damage and equipment shutoff. For 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.

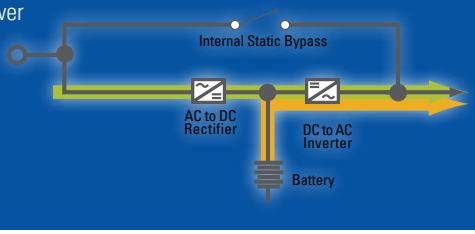
Series 5 Line Interactive UPS: Keeping it smooth



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 oxidisation. 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 residing 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.

Eaton Service Helpdesk

Emergencies - Three-phase products and Single-phase greater than 6kVA

For emergencies you can call our 24 Hour Hotline where a service technician can be dispatched to attend site.

AUST 1300 303 059 **NZ 0508 697 378**

(Callout fees are reduced or do not apply depending on the service contract level you hold with Eaton)

General Service Enquires

You can reach us by calling our 24 Hour Hotline

AUST - 1300 303 059
Hours: 8.30am to 6.00pm AEST on business days
Email: eeshelpdesk@eaton.com

NZ - 0508 697 378
Hours: 8.30am to 5.00pm NZT on business days
Email: nzservice@eaton.com

Service

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/AESDT, 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.3.*** Disposal collection will take place during the time of delivery of a new unit or next business day. Clients are to have Eaton products appropriately packaged and ready for collection to avoid additional transport charges.
4.**** 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

Technology: Series 3 (Standby)
Rating: 550 & 700VA
Voltage: 240Vac
Backup time: Typical 5 min
Configuration: Powerboard style

ECO CONTROL
up to 30% energy saving

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

Rating (VA/W)	**550VA / 330W**	**700VA / 420W**
Model numbers	3S550AU	3S700AU
Output connection	3 x Aust 3 Pin 10A outlets with battery backup and surge protection + 3 x Aust. 3 Pin 10A outlets with surge protection	
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

Ideal for protecting

- Computers and Peripherals
- POS Equipment

650-850VA

1100-2000VA

5E Series Technical Specifications					
Technology	Line Interactive (Automatic Voltage Regulation)				
Rating, VA/Watts	650VA / 360W	850VA / 480W	1100VA / 660W	1500VA / 900W	2000VA / 1200W
Model Numbers	5E650IUSB-AU	5E850IUSB-AU	5E1100IUSB-AU	5E1500IUSB-AU	5E2000IUSB-AU
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					
Dimensions (H x W x D)	148 x 100 x 288 mm		180 x 133 x 330 mm		
Weight	4.6 kg	5.1 kg	9.3 kg	10.5 kg	10.5 kg
Warranty	2 years				
Warranty+	Optional warranty uplifts				

*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

Technology: Series 5 (Line Interactive)
Rating: 550-1600VA
Voltage: 240 Vac
Backup time: Typical 4 min
Configuration: Tower

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)

Ideal for protecting

- Workstations
- Business Telephony
- Network devices
- Point-of-sale equipment

Eaton 5S Technical Specifications					
Rating (VA/W)	550VA/330W	700VA/420W	850VA/510W	1200VA/750W	1600VA/1000W
Electrical Charecteristics					
Technology	Technology Line-Interactive (AVR with Booster + Fader)				
Input voltage range	175V-275V				
Output voltage	240 V				
Frequency	50-60 Hz autoselect				
Connections					
Number of AUS outlets	6				
Outlets with surge protection and battery backup / Outlets with surge protection only	3 / 3				
Batteries					
Typical backup times at 50 and 70% load*	10/6 min	9/5 min	9/5 min	9/5 min	9/5 min
Battery management	Automatic battery test, deep-discharge protection, cold-start capable, replaceable batteries				
Communication					
User Interface	LED		LCD		
Communication Port	HID-compliant USB port for automatic integration with most common operating systems (Windows Vista, 7 & 8, Linux, Mac OS X), cable supplied				
Data line protection	Tel/Fax/Modem/Internet and Ethernet				
Standards					
Safety & EMC	IEC/EN 62040-1, IEC/EN 62040 -2, CB Report, CE mark C-Tick				
Dimensions and Weight					
Dimensions H x W x D	250 x 87 x 260 mm			250 x 87 x 382 mm	
Weight	4.96kg	5.98kg	6.50kg	9.48kg	11.08kg
Customer Service and Support					
Warranty	2 years				

Part Numbers	550	700	850	1200	1600
5S	5S550AU	5S700AU	5S850AU	5S1200AU	5S1600AU

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

Premier high density series 5 protection for network devices

Eaton 5P

1. Communications card slot
2. Remotely switchable outlet groups
3. Remote On/Off, Remote Power Off terminal
4. USB Port
5. Serial Port
6. Primary outlet group

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

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

Eaton 5P

Eaton 5P Technical Specifications				
Rating (VA/W)	**650VA / 420W**	**850VA / 600W**	**1150VA / 770W**	**1550VA / 1100W**
Format	**Tower or 1U Rack**			
Electrical characteristics				
Technology	Line-Interactive High Frequency (Pure Sinewave, Booster + Fader)			
Input voltage and frequency without using batteries	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			
Output voltage and frequency	230 V (+6/-10 %) (Adjustable to 200V / 208V / 220V / 230V / 240V), 50/60 Hz +/- 0.1 % (autosensing)			
Connections				
Input	Tower: Fixed line cord 10A AU 1.8mtr Rack: IEC C14 (10A) socket	Tower: Fixed line cord 10A AU 1.8mtr Rack: IEC C14 (10A) socket	Tower: Fixed line cord 10A AU 1.8mtr Rack: IEC C14 (10A) socket	Tower: Fixed line cord 10A AU 1.8mtr Rack: IEC C14 (10A) socket
Outputs	Tower: 2 x AU 10A, 3 x IEC Rack: 4 x IEC C13 (10A) C13 (10A)	Tower: 2 x AU 10A, 3 x IEC C13 (10A) Rack: 4 x IEC C13 (10A)	Tower: 2 x AU 10A, 3 x IEC C13 (10A) Rack: 6 x IEC C13 (10A)	Tower: 2 x AU 10A, 3 x IEC C13 (10A) Rack: 6 x IEC C13 (10A)
Remotely controlled sockets	Tower: 2 x 10A AU individually switched	Tower: 2 x 10A AU individually switched	Tower: 2 x 10A AU individually switched	Tower: 2 x 10A AU individually switched
	Rack: 2 x IEC C13 (10A) individually switched	Rack: 2 x IEC C13 (10A) individually switched	Rack: 2 x IEC C13 (10A) individually switched	Rack: 2 x IEC C13 (10A) individually switched
Batteries Typical backup times for 50 and 70% load*				
5P	9/5.5 mins	12/7.5 mins	12/7.5 mins	13/8.5 mins
Battery management	ABM & Temperature compensated charging method (user selectable), Automatic battery test, deep discharge protection, to automatic recognition of external battery units.			
Interfaces				
Communication ports	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			
Communications card slots	1 slot for NETWORK-MS, MODBUS-MS or RELAY-MS cards			
Operating conditions, standards and approvals				
Operating temperature	Models 650, 850 & 1550 = 0°C to +35°C, Model 1550 = 0°C to +40°C			
Noise Level	< 40dBA			
Performance - Safety - EMC	IEC/EN 62040-1-1 (Safety), IEC/EN 62040-2 (EMC), IEC/EN 62040-3 (Performance), C-Tick			
Approvals	CE, CB Report(TUV), C-Tick			
Dimensions W x D x H / Weight				
UPS Dimensions (mm) & weight (kg)-Tower	150 x 345 x 230mm / 7.8kg	150 x 345 x 230mm / 10.4kg	150 x 345 x 230mm / 11.1kg	150 x 445 x 230mm / 15.6kg
UPS Dimensions (mm) & weight (kg)-Rack	438 x 364 x 43.2mm(1RU) / 8.6kg	438 x 509 x 43.2mm(1RU) / 13.8kg	438 x 509 x 43.2mm(1RU) / 14.6kg	438 x 554 x 43.2mm(1RU) / 19.4kg
Customer Service & Support				
Warranty	3 years			
Part Numbers				
5P Tower	5P650AU	5P850AU	5P1150AU	5P1550AU
5P Rack	5P650iR	5P850iR	5P1150iR	5P1550iR

* 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

1. Graphical LCD display
2. Panel for batteries replacement (Hot swappable)
3. USB port + Serial port
4. 8 IEC 10A (+1 IEC 16A outlets for 3000VA models)
5. Communication card slot (Rack and R/T models only)
6. ROO/RPO terminal (Rack and R/T models only)

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

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

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

** Based on 100% load

Premier efficient & manageable protection for high-end IT applications

Eaton 5PX

1. Graphical LCD display
2. Panel for batteries replacement (Hot swappable)
3. 1 USB port + 1 serial port + remote ON/OFF and remote power OFF inputs
4. External battery (EBM) connector
5. 8 IEC 10A + 1 IEC 16A sockets with energy metering (including 4 programmable sockets)
6. Mini Slot for connectivity cards

LCD display for ease of configuration and management

Versatile rack/tower

Technology:	Series 5 (Line Interactive)
Rating:	1500-3000VA
Voltage:	230 Vac
Configuration:	Rack-mount/ Tower convertible

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	1500	2000	2200	3000
Rating (VA/W)	1500VA / 1350W	2000VA / 1800W	2200VA / 1980W	3000VA / 2700W
Format	RT2U (rack / tower 2U)	RT2U (rack / tower 2U)	RT2U (rack / tower 2U)	RT2U & RT3U
Electrical characteristics				
Technology	Line-Interactive High Frequency (Pure Sinewave, Booster + Fader)			
Input voltage and frequency ranges	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			
Output voltage and frequency	230 V (+6/-10 %) (Adjustable to 200V / 208V / 220V / 230V / 240V), 50/60 Hz +/- 0.1 % (autosensing)			
Connections				
Input	1 IEC C14 (10 A) socket	1 IEC C14 (10 A) socket	1 IEC C20 (16 A) socket	1 IEC C20 (16 A) socket
Outputs	8 IEC C13 (10 A)	8 IEC C13 (10 A) sockets	8 IEC C13 (10 A) sockets, 1 IEC C19 (16 A) socket	8 IEC C13 (10 A) sockets, 1 IEC C19 (16 A) socket
Remotely controlled sockets	2 groups of 2 x IEC C13 (10 A)			
Additional outputs with Hot Swap MBP	4 AUS 10A + 1 IEC 16A sockets or 6 IEC 10 A sockets or terminal blocks (HW version)			
Additional outputs with FlexPDU	6 AUS 10A + 1 IEC 16A sockets or 12 IEC 10 A sockets			
Batteries - Typical backup times for 50 and 70% load*				
5PX	19/11 mins	16/8 mins	15/8 mins	14/9 mins
5PX + 1 EBM	90/54 mins	66/39 mins	60/35 mins	66/38 mins
5PX + 4 EBM	285/180 mins	231/138 mins	210/125 mins	213/131 mins
Battery management	ABM® & Temperature compensated charging method (user selectable), Automatic battery test, deep discharge protection, automatic recognition of external battery units			
Interfaces				
Communication ports	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			
Communications card slots	1 Mini Slot for Network Card-MS, Relay Card-MS and Network & Modbus Card-MS connectivity cards			
Operating conditions, standards and approvals				
Operating temperature	0 to 40°C			
Noise Level	< 45 dBA	< 45 dBA	< 45 dBA	< 50 dBA
Performance - Safety - EMC	IEC/EN 62040-1-1 (Safety), IEC/EN 62040-2 (EMC), IEC/EN 62040-3 (Performance), C-Tick			
Approvals	CE, CB report, TÜV			
Dimensions W x D x H / Weight				
UPS Dimensions (mm)	441 x 522 x 86.2 (2U)	441 x 522 x 86.2 (2U)	441 x 522 x 86.2 (2U)	441 x 647 x 86.2 (RT2U)
				441 x 497 x 130.7 (RT3U)
UPS Weight (kg)	27.6 kg	28.5 kg	28.5 kg	38.08 (RT2U), 37.33 (RT3U)
Dimensions of EBM	same as UPS			
Weight of the EBM	32.8 kg	32.8 kg	32.8 kg	46.4kg (RT2U), 44.4kg (RT3U)
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	1500	2000	2200	3000 (RT3U)	3000 (RT2U)
UPS	5PX1500iRT	5PX2000iRT	5PX2200iRT2UAU	5PX3000iRT3UAU	5PX3000iRT2UAU
EBM	5PXEBM48RT	5PXEBM48RT	5PXEBM48RT	5PXEBM72RT3U	5PXEBM72RT2U

Premier series 9 Tower UPS for all critical applications

Eaton 9130 Tower

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.

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

Eaton 9130 Tower

Eaton 9130 Tower Technical Specifications						
Rating	700VA	1000VA	1500VA	2000VA	3000VA	6000VA
Part number	PW9130G700T-XLAU	PW9130G1000T-XLAU	PW9130G1500T-XLAU	PW9130G2000T-XLAU	PW9130G3000T-XLAU	PW9130G6000T-XLAU
Capacity (VA/Watts)	700/630	1000/900	1500/1350	2000/1800	3000/2700	6000/5400
Dimensions WxDxH (mm)	160x355x250	160x383x250	160x435x250	214x410x345	214x410x345	242x542x575
Weight (kg)	12.2	14.5	19.0	34.5	34.5	75.5
Input connection	IEC C14-10A	IEC C14-10A	IEC C14-10A	IEC C14-10A	IEC C20-16A	Hard Wired
Output connection	(4) AUST 10A	(4) AUST 10A	(4) AUST 10A	(5) AUST 10A (1) IEC C13-10A	(5) AUST 15A (1) IEC C19-16A	Hard Wired
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	0°C – +40°C					
Storage temperature	-15°C – +40°C					
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					
Customer Service & Support						
Warranty	2 years					

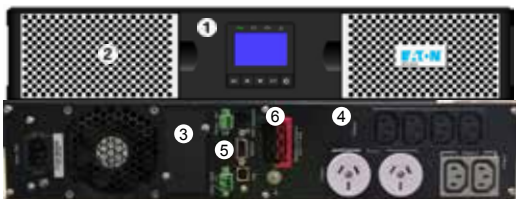
Battery Runtimes (in minutes) Standard Extended Battery Modules						
Load (VA/Watts)	**% 0f Load**	**Internal Batteries**	**w/1 EBM**	**w/2 EBM**	**w/3 EBM**	**w/4 EBM**
PW9130G700T						
700/630	100%	5	N/A	N/A	N/A	N/A
350/315	50%	14	N/A	N/A	N/A	N/A
PW9130G1000T-XLAU						
1000/900	100%	6	31	51	82	100
500/450	50%	19	68	111	192	246
PW9130G1500T-XLAU						
1500/1350	100%	5	24	46	69	90
750/675	50%	14	61	112	172	221
PW9130G2000T-XLAU						
2000/1800	100%	11	44	79	115	162
1000/900	50%	28	96	168	258	336
PW9130G3000T-XLAU						
3000/2700	100%	6	21	51	66	93
1500/1350	50%	15	60	100	169	215
PW9130G6000T-XLAU						
6000/5400	100%	6	33	64	96	130
3000/2700	50%	19	78	148	211	266

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

1. Graphical LCD display :
   - Clear information on UPS status and measurements
   - Enhanced configuration capabilities
2. Panel for batteries replacement (Hot swappable)
3. Slot for Management card
4. Outputs: IEC 10A, AUS GPO 10A with energy metering (including 2 prog'able groups G1 & G2)
5. USB port,1 serial port, Remote ON/OFF, Remote power OFF and Relay output
6. External battery (EBM) connector



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	2000VA		
Rating (VA/W)	2000VA/1800W		
Format	RT2U (tower/rack 2U)		
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			
Typical backup times (minutes)*	500W	900W	1800W
9PX 2000	23	12	4
9PX 2000 + 1 EBM	114	65	29
9PX 2000 + 4 EBM	453	261	118
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 Remote Power 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	9PX2000iRTAU
EBM	2U: 9PXEBM72RT2U
2m battery connection cable	EBMCBL72
Battery Integration System	BINTSYS

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

Advanced protection for critical networks

Eaton 9PX UPS 1-3 kVA

1. Graphical LCD display :
   - Clear information on UPS status and measurements
   - Enhanced configuration capabilities
2. Panel for batteries replacement (Hot swappable)
3. Slot for Management card
4. Outputs: 8 x IEC 10A + 2 x IEC 16 A with energy metering (including 2 program able groups)
5. USB port,1 serial port, Remote ON/OFF, Remote power OFF and Relay output
6. External battery (EBM) connector

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 efficiencylevel 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*	9PX 1kVA	9PX 1.5kVA	9PX 2.2kVA	9PX 3kVA
UPS RT3U			9PX2200IRT3UANZ	9PX3000IRT3UANZ
UPS RT2U	9PX1000IRT2UANZ	9PX1500IRT2UANZ	9PX2200IRT2UANZ	9PX3000IRT2UANZ
EBM	9PXEBM48RT2U	9PXEBM48RT2U	2U: 9PXEBM72RT2U 3U: 9PXEBM72RT3U	2U: 9PXEBM72RT2U 3U: 9PXEBM72RT3U
2m battery connection cable	EBMCBL48	EBMCBL48	EBMCBL72	EBMCBL72
Battery integration system	BINTSYS			

Eaton 9PX UPS 1-3 kVA

Technical Specifications	1000	1500	2200	3000VA
Rating (VA/W)	1000VA/1000W	1500VA/1500W	2200VA/2200W	3000VA/3000W
Format	RT2U (tower/rack 2U)		RT2U (tower/rack 2U) and RT3U (tower/rack 3U)	
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 temeprature	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				
UPS	86.5*440*450/17.4kg	86.5*440*450/18.9kg	2U version: 86.5*440*605/25kg 3U version: 130*440*485/24.5kg	2U version: 86.5*440*605/27.6kg 3U version: 130*440*485/27.4kg
EBM	86.5*440*450/29.8kg		2U version: 86.5*440*605/39.2kg 3U version: 130*440*485/38.2kg	
Customer service and support				
Warranty	3 years on electronics			
Batteries				

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

1. Remote Off/On and Remote Power Off connectors
2. Slot for Network-MS, ModBus-MS or Relay-MS cards
3. Parallel operation port (DB15)
4. External battery module (EBM) connector with automatic detection (RJ11)
5. 8 IEC 10A sockets (2 groups of 4 manageable sockets) with cable retention system
6. 2 IEC 16A sockets with cable retention system
7. DB 9 with output contacts
8. USB and serial ports
9. Input/Ouput connection

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

Technical Specifications	5kVA	6kVA	8kVA	11kVA
Rating (kVA/kW)	5kVA/4.5kW	6kVA/5.4kW	8kVA/7.2kW	11kVA/10kW
Electrical Characteristics				
Technology	On-line double conversion with Power Factor Correction (PFC) system			
Nominal voltage	200 / 208 / 220 / 230 / 240V		200 / 208 / 220 / 230 / 240 / 250V	
Input voltage range	176-276V without derating (up to 100–276V with derating)			
Output voltage/THDU	200/208/220/230/240V +/– 1%; THDU <2%		200/208/220/230/240/250V +/– 1%; THDU <2%	
Input frequency range/THDI	40-70Hz, 50/60Hz autoselection, frequency converter as standard, THDI < 5%			
Efficiency	Up to 94% in Online mode, 98% in Hi-Efficiency mode		Up to 95% in Online mode, 98% in Hi-Efficiency mode	
Crest factor/short circuit current	3:1/90A	3:1/90A	3:1/120A	3:1/150A
Overload capacity	102–110% : 120s, 110–125%: 60s, 125–150%: 10s, >150%: 500ms		102–110% : 120s, 110–125%: 60s, 125–150%: 10s, >150%: 900ms	
Connections				
Input	Terminal block (up to 10 mm²)		Terminal block (up to 16mm²)	
Outputs	Terminal block + 2 controlled groups of 4 IEC C13 (10A) + 2 IEC C19 (16A)		Terminal block	
Outputs with HotSwap Maintenance Bypass	Terminal block + 3 IEC C13 (10A) + 2 IEC C19 (16A)		Terminal block + 4 IEC C19 (16A)	
Batteries				
Typical backup times at 50 and 70% load*				
9PX	13/10 min	11/8 min	20/15 min	13/9min
9PX + 1 EBM	60/40 min	48/34 min	48/32 min	32/21 min
9PX + 4 EBM	220/150 min	170/120 min	140/100 min	100/70 min
Battery management	ABM® and 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 RS232 serial port (USB and RS232 ports cannot be used simultaneously), 4 dry contacts (DB9), 1 minmi teinral block for remote On/Off and 1 for remote power Off, 1 DB15 for parallel operation.			
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 continuous			
Noise level	<45dB	<45dB	<48dB	<50dB
Safety	IEC/EN 62040-1, UL 1778, CSA 22.2			
EMC, performance	IEC/EN 62040 -2 , FCC Class A, IEC/EN 62040-3 (Performance)			
Approvals	CE, CB report (TUV), UL			
Dimensions H x W x D/Weight				
UPS	440(19'')*130(3U)*685mm/48kg	440(19'')*130(3U)*685mm/48kg	440(19'')*260(6U)*700mm/84kg	440(19'')*260(6U)*700mm/86kg
EBM	440(19'')*130(3U)*645mm/68kg	440(19'')*130(3U)*645mm/68kg	440(19'')*130(3U)*680mm/65kg	440(19'')*130(3U)*680mm/65kg
Power module	-	-	440(19'')*130(3U)*700mm/19kg	440(19'')*130(3U)*700mm/21kg
Customer Service and 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

Single enclosure integrated solution for IT equipment

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.

Monitoring

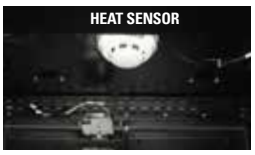
- Rack-mountable, 1U space
- Set UPS, air conditioning and environmental sensing
- On-line LCD display
- Remote monitoring

UPS

- Eaton 9PX on-line UPS
- 3kVA/3kW output
- 2RMU and 3RMU
- Other models available upon request

Power distribution module

- Rack-mount, occupies 3U space
- Integrated input and output power distribution and surge protection modules



Sensors & accessories

- Temperature, humidity, smoke, flooding, magnetic door sensors
- Rear fluorescent lighting

Cooling unit

- Rack-mount, 5RMU
- DC inverter compressor
- Non-stop cooling operation
- R410A environmentally friendly refrigerant

Eaton Micro Data Center

Eaton Micro Data Center Technical Specifications		
System Specifications	Dimensions (H x W x D)	2000mmH (42U) x 600mmW x 1200mmD
	# of Enclosures	1
	PUE (Full Load)	1.2 (Optimal)
	Input Power	AC 230V, 50/60Hz
	Max. Power Density	3.0kW / Enclosure
	Recommended IT Load	3.0kW (Max)
	Installation Site	Elevated floor installation / general ground installation
UPS Specification	Max. Power Rating	6kVA (2 x 3kVA UPS)
	Max. Equipment Load	3kVA
	Air Conditioning	Powered by dedicated 3kVA UPS
	Model	9PX (3kVA)
	Input Voltage Range	176 – 276V without derating (up to 100-276V with derating)
	Input Frequency Range	40-70Hz, 50/60Hz autoselection
	Power Factor	1.0
	Installation	Rackmount, 2RMU (each)
Power Distribution System	Installation Dimensions	Rack mount, 3RMU
	Power Distribution	Mains input and UPS output, lightning protection and maintenance bypass
	PDU	G3 Series (EMAB22): Managed PDU (0U), C20 Plug, 16A, 20 x C13, 4 x C19 Outlets
Cooling and Airflow Management System	Total Cooling Capacity	3.5kW
	A/C Total Air Volume	580m3/h
	A/C Power Supply (Voltage)	198 to 253 VAC
	A/C Installation	Rack-mountable, bottom of the enclosure interior, 5RMU
Enclosure Subsystem	Load Rating	1500kg
	Available RMU Space	29 RMU
	Internal Lighting	Standard – rear mounted
	Paint Color	Black (RAL9005)
	Front Door	Single Glass Door (Standard), Solid steel door (optional)
	Rear Door	Double Steel Door (Solid)
Monitoring System	Host Monitoring	Rack mount, 1U Height
	Monitoring Interface	7-inch Color Touch Screen
	Remote Monitoring	Web Page Integrated Monitoring Software
	Content	System Power, Cooling, Smoke, Flooding, Door Status
	Sensors	Flooding (1), Temperature and Humidity (1), Smoke (1), Doors (2)

Eaton 93PS

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

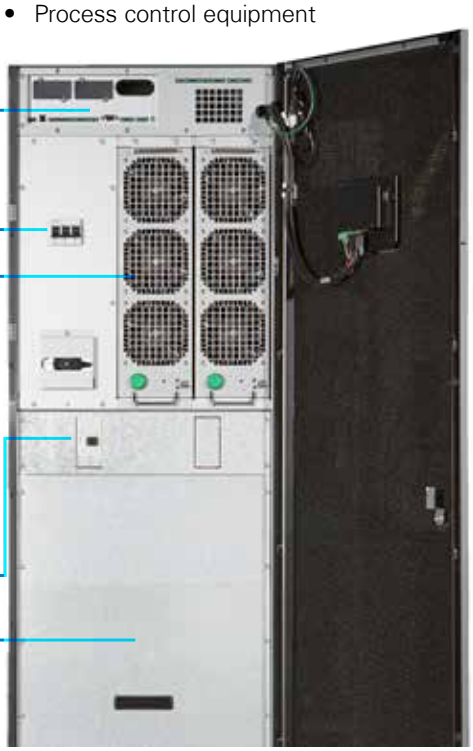
Normal operation

Alarm

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



Technical Specifications	8-20 kW			8-40 kW		
UPS output power rating (1.0 p.f.)	8, 10, 15, 20			8, 10, 15, 20, 30, 40, 8+8, 10+10, 15+15, 20+20		
Model catalogue reference	93PS-XX(20)-YY-			93PS-XX(40)-YY-		
Number of internal batteries	0 to 2 x 32 blocks			0 to 4 x 32 blocks		
UPS options	Internal maintenance bypass switch (MBS) External maintenance bypass switch					
	External battery cabinets					
Upgradability	Yes, up to 20 kW			Yes, up to 40 kW		
External paralleling	Up to 4 units with HotSync technology					
UPS topology	Double conversion					
Efficiency in Double conversion mode	>96%					
Efficiency in Energy Saver System (ESS)	Up to 99%					
UPS dimensions (width x depth x height)	335 x 750 x 1300 mm			480 x 750 x 1750 mm		
UPS Degree of protection	IP 20					
Acoustic noise at 1 m, in	< 60 dBA in double conversion					
25 °C ambient temperature	< 47 dBA in ESS					
	1000 m (3300 ft) above sea level at 40 °C					
Maximum service altitude	Maximum 2000 m (6600 ft) with 1% derating per each add. 100 m					
Battery						
Battery technology	12 V, VRLA					
Battery design life	5 or 10 years					
Battery quantity	32 blocks, 192 cells per battery string					
Battery voltage	384 V					
Nominal Ah capacity (C10)	9 Ah or 7 Ah Long life					
Charge current limit	Default 5 A, configurable Maximum 25 A			Default 10 A, configurable Maximum 50 A		
Battery start option	Yes					
Input						
Rated input voltage	220/380 V; 230/400 V; 240/415 V					
Voltage tolerance:						
Rectifier input	187 to 276 V					
Bypass input	rated voltage -15% / +10%					
Rated input frequency	50 or 60 Hz, user configurable					
Frequency tolerance	40 to 72 Hz					
Input wiring	3 phases + neutral					
Input power factor	0.99					
Input ITHD	8 kW < 5%	10 kW < 4%	15-40 kW < 3%			
Rated input r.m.s. current	8 kW	10 kW	15 kW	20 kW	30 kW	40 kW
380V	13 A	16 A	24 A	32 A	48 A	63 A
400V	12 A	15 A	23 A	30 A	46 A	61 A
415V	12 A	15 A	22 A	29 A	44 A	58 A
Soft start capability	Yes					
Back feed protection	Yes, for rectifier and bypass lines					
Output						
Output wiring	3 phases + neutral					
Rated output voltage	220/380 V; 230/400 V; 240/415 V, configurable					
Total voltage harmonic distortion						
100% linear load	< 1%					
100% non-linear load	< 5%					
Overload capability On inverter On bypass	10 min 102-110% load 60 sec 111-125% load 10 sec 126-150% load 300 ms >150% load Continuous < 125% load 20 ms 1000% load					
Load power factor - Rated	1					
Load power factor - Permitted range	0.8 lagging to 0.8 leading					
Communication Circuits						
MiniSlot	2 communication bays					
Network/SNMP interface	Yes, standard					
Standard connectivity ports	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					
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/93PS.aspx?cx=22

Essential protection for Data Centre and Industrial applications

Eaton 93E

Technology: Series 9 (Double Conversion On Line)
Rating: 20-400 kVA at 0.9 p.f.
Voltage: 230/400VAC 50/60 Hz
Backup: Typical 5-60 min (extendable up to several hours)
Configuration: Cabinet

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.

Applications:

- Small to medium data centres
- Corporate
- Telecom
- Healthcare
- Banking
- Industrial
- Education
- Government

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)

Eaton 93E

Eaton 93E Technical Specifications		
Power		
Ratings	15kVA/13.5kW 30kVA/27kW 60kVA/54kW 100kVA/90kW 160kVA/144kW 300kVA/270kW	20kVA/18kW 40kVA/36kW 80kVA/72kW 120kVA/108kW 200kVA/180kW 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	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 960 500 x 710 x 1230 500 x 710 x 1500 600 x 800 x 1876 1600 x 820 x 1880	15-20kVA (with internal battery) 30kVA (with internal battery) 40kVA (with internal battery) 60-200kVA 300/400kVA
Cabinet rating	IP20 with standard washable dust filters	
Weights without internal battery	15/20kVA-72 kg, 30kVA-91kg, 40kVA-120kg, 60kVA-202kg, 80kVA-245kg, 100kVA-283kg, 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	
LEDs	(4) LEDs for notice and alarm	
Audible alarms	Yes	
Communication ports	(1) RS-232, (1) USB, (1) EPO	
Communication slots	(2) Mini-slot communication bays	
Environmental		
Operating temperature	0^{O}C to +40^{O}C Batteries recommended max. +25oC	
Storage temperature	-25^{O}C to +55^{O}C without batteries +15^{O}C to +25^{O}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^{O}C	
Certifications		
EMI standards	EN55022/EN55024	
EMC compliance	IEC 62040-2	
Quality	ISO 9001: 2000 and ISO 14001:1996	
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	
116750224-001	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

Premier modular protection for high availability systems

Eaton 93PM

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

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.

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

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

An Eaton Green Solution

ESS
Energy Saver System

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 150kW) 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 standarts	
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

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.

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.

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.

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.

Due 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.

Easy management

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

With the 93PR's graphical LCD interface you can track stats on energy savings, battery time, outage tracking, load profiling and much more.

The green/yellow/red LED light-bars make system status visible from a distance in data centres.

Green light bar showing healthy UPS

Red light bar showing alerts on system

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

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

Eaton 93PR Technical Specifications								
General								
UPS output power rating (1.0 p.f.)	25, 50, 75, 100, 125, 150, 175, 200kW							
Efficiency in double conversion mode	> 96%							
Efficiency in Energy Saver System (ESS)	> 99%							
Static bypass rating	200kW							
External paralleling	up to 4 units with HotSync technology							
UPS topology	Double conversion							
UPS degree of protection	IP20							
Acoustic noise at 1 m, in 25 °C ambient temperature	< 70 dBA in double conversion, < 55 dBA in ESS							
Altitude (max)	1000m above sea level at 40 °C. Maximum 2000m with 1% derating per each add. 100 m							
Input								
Rated input voltage	220/380 V, 230/400 V, 240/415 V 50/60 Hz							
Voltage tolerance - Rectifier input	187 to 276 V							
Voltage tolerance - Bypass input	rated voltage -15% / +10%							
Rated input frequency	50 or 60 Hz, user configurable							
Frequency tolerance	40 to 72 Hz							
Input wiring	3 phase + neutral							
Input power factor at 100% load	> 0.99							
Input ITHD	< 3%							
Rated input r.m.s current	25kW	50kW	75kW	100kW	125kW	150kW	175kW	200kW
380V	40 A	80 A	120 A	159 A	199 A	239 A	278 A	318 A
400V	38 A	76 A	114 A	151 A	189 A	227 A	264 A	302 A
415V	37 A	73 A	110 A	146 A	182 A	219 A	255 A	291 A
Soft start capability	Yes							
Internal backfeed protection	Yes							
Output								
Output wiring	3 phase + neutral							
Rated output voltage rating	220/380 V, 230/400 V, 240/415 V, configurable							
Total voltage harmonic distortion	< 1% (100% linear load); < 5% (100% non-linear load)							
Output power factor	1							
Permitted load power factor	0.8 lagging to 0.8 leading							
Overload on inverter	10 min 102-110%, 60 sec 111-125%, 10 sec 126-150%, 300 ms > 150%.							
Overload on bypass	Continuous < 125%, 20 ms 1000%							
Battery								
Battery type	12V, VRLA							
Charging method	ABM technology or Float							
Temperature compensation	Optional							
Battery nominal voltage (VRLA)	480 V							
Battery quantity	36 to 44 blocks. Default is 40 blocks							
Charge current limit	Default 5A, configurable maximum 25A per UPM							
Battery start capability	Yes							
Communications								
Minislot	3 communication bays							
Network/SNMP interface	Yes, optional							
Serial ports	Built-in host and device USB							
Standard connectivity ports	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							
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

96.3% double conversion efficiency, delivers 10% more power

Eaton 9395P

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.

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

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

Eaton 9395P

Eaton 9395P Technical Specifications								
UPS output power rating								
kVA	250	300	500	600	750	900	1000	1200
kW	250	300	500	600	750	900	1000	1200
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 parallelling with Hot Sync technology	Up to 8							
Internal N+1 redundance capable	In 600 kVA: 300 kVA In 900 kVA: 600 kVA In 1200 kVA: 900 kVA							
Field upgradable	Yes							
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							
	+15% / -15% for 400 V or 415 V							
Input voltage range	+15% / -10% for 380 V							
	+10% / -10% for bypass							
Input frequency range	45-65 Hz							
Input power factor	0.99							
Input ITHD	<3% on nominal load in double conversion mode							
Soft start capability	Yes							
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							

Dimensions and weights (wxdxh)			Charging current (max A)
300 kVA	1350 x 880 x 1880 mm	830 kg	120
600 kVA	1890 x 880 x 1880 mm	1440 kg	240
900 kVA	3710 x 880 x 1880 mm	2680 kg	360
1200 kVA	4450 x 880 x 1880 mm	3120 kg	480

*Limited by maximum UPS input current rating

For information on product warranty, please visit http://powerquality.eaton.com/Products-services/Backup-Power-UPS/9395P.aspx?cx=22

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.

Normal operation

Alarm

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 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	1500		3000VA			
Rating (VA/W)	1500VA/1500W		3000VA/3000W			
Format	RT2U (tower/rack 2U)		RT3U (tower/rack 3U)			
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	500W	800W	1200W	1800W	2500W
9PX 1500	38	23	13	7		
9PX 1500 + 1 EBM/+4 EBM	143/536	86/319	52/192	32/120		
9PX 3000	60	36	22	13	7	4
9PX 3000 + 1 EBM/+4 EBM	221/824	135/504	83/307	52/194	33/122	22/82
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 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 temeprature	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*485/27.4kg			
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*	9PX 1.5kVA	9PX 3kVA
UPS	9PX1500ITM	9PX3000ITM
EBM	9PXEBM48RT2U	9PXEBM72RT3U
2m battery connection cable	EBMCBL48	EBMCBL72
Marine FIlter**	9PXMF3KI	

*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 Marine UPS

Eaton 9PHD Technical Specifications		
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%	
Inverter/rectifier topology	Transformer-free IGBT with PWM	
Audible noise	30–50 kW:	< 60 dBA
	30–50 kW:	< 65 dBA
	ESS operation:	< 47 dBA
Ambient temperature	0°C to 45°C at sea level, higher temperatures are optional	
Ingress protection	IP23, Optional: IP33;IP54	
Input		
Input wiring	3ph + N + PE / 3ph + PE	
Nominal voltage rating (configurable)	380 V-480 V, 50/60 Hz	
With optional transformer	208 V- 690 V, 50/60 Hz	
Input voltage range	Rectifier input + 20%, if voltage > 440 V +10% Low -15% at 100% load, -40% at 50% load without battery discharge Bypass +10% - (-15%)	
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	
Output		
Output wiring	3ph + N + PE/ 3ph + PE	
Nominal voltage rating (configurable)	380 V-480 V, 50/60 Hz	
With optional transformer	208 V- 690 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)	
Communications		
MiniSlot	4 communication bays	
Serial ports	Built-in host and device USB	
Relay inputs/outputs	5 relay inputs and dedicated EPO 1 relay output	
Compliance with standards		
Safety (CB certified)	IEC 62040-1	Marine class certificates are available from any class example: DNV, ABS, Lloyds Register Bueray Veritas etc
EMC	IEC 62040-2	
Performance	IEC 62040-3	
Battery		
Battery type	VRLA, Ni-Cd	
Charging method	ABM technology or Float	
Temperature compensation	Optional	
Battery nominal voltage (VRLA)	From 432 V (36 x 12 V, 216 cells) to 480 V (40 x 12 V, 240 cells) (Note: Strings with different battery voltage may not be paralleled)	
Charging current maximum*	30–50 kW 29.3 A 80–100 kW 58.6 A 120–150 kW 87.9 A 160–200 kW 117.2 A	
Battery start capability	Yes	

* when load level ≤ 40 kW/UPM

ePDU

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

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

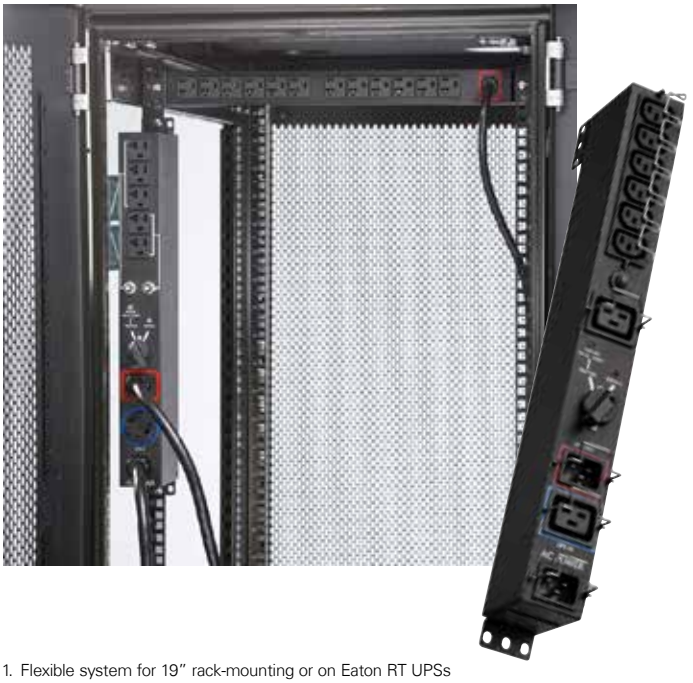
Manage your power consumption

- 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, W, A and kWhr measurement enables analysis and tracking
- Enables you to see what your servers are doing

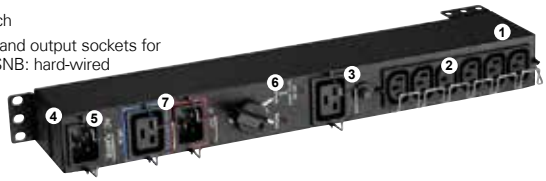
Complete control and understanding

- 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

Eaton FlexPDU, Eaton HotSwap MBP



1. Flexible system for 19" rack-mounting or on Eaton RT UPSs
2. 3x3 pin ANZ outlets or IEC 10 A sockets
3. IEC 16 A output for cascading
4. IEC 16 A input socket
5. Retaining clip
6. Rotary bypass switch
7. Colour coded input and output sockets for connecting the UPSNB: hard-wired version available



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	Eaton FlexPDU	Eaton HotSwap MBP 3000	Eaton HotSwap MBP 6000	Eaton HotSwap MBP 11000
Maximum power	3000 VA	3000 VA	6000 VA	11000 VA
Nominal Voltage	220 - 240 V	220 - 240 V	220 - 240 V	200-240 V (350 - 430 V for 3 ph version)
Installation				
Format	1U 19" rack-mounting with multi-position mountings	>1U 19" rack-mounting with multi-position mountings	3U 19" rack	3U 19" rack
Installation	19" rack, wall mounting or on Eaton RT UPSs	19" rack, wall mounting or on Eaton 9PX/SX UPSs		
Dimensions H x W x D	44 x 483 x 80 mm	52 x 483 x 120 mm	52 x 483 x 120 mm	89 x 483 x 90 mm
Connection				
Inputs	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	IEC models: 1 IEC C20 (16 A) connector and 1 IEC 16 A - 16 A cable (1) HW (Hard-Wired): terminal block	Hardwired terminal block	Hardwired terminal block
Outputs				
IEC	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 3 pin 10 A ANZ 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
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.

RE series enclosures

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 ePDU's.

- Toolless ePDU mounting Fast installation for all Eaton 0U ePDU's
- 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.

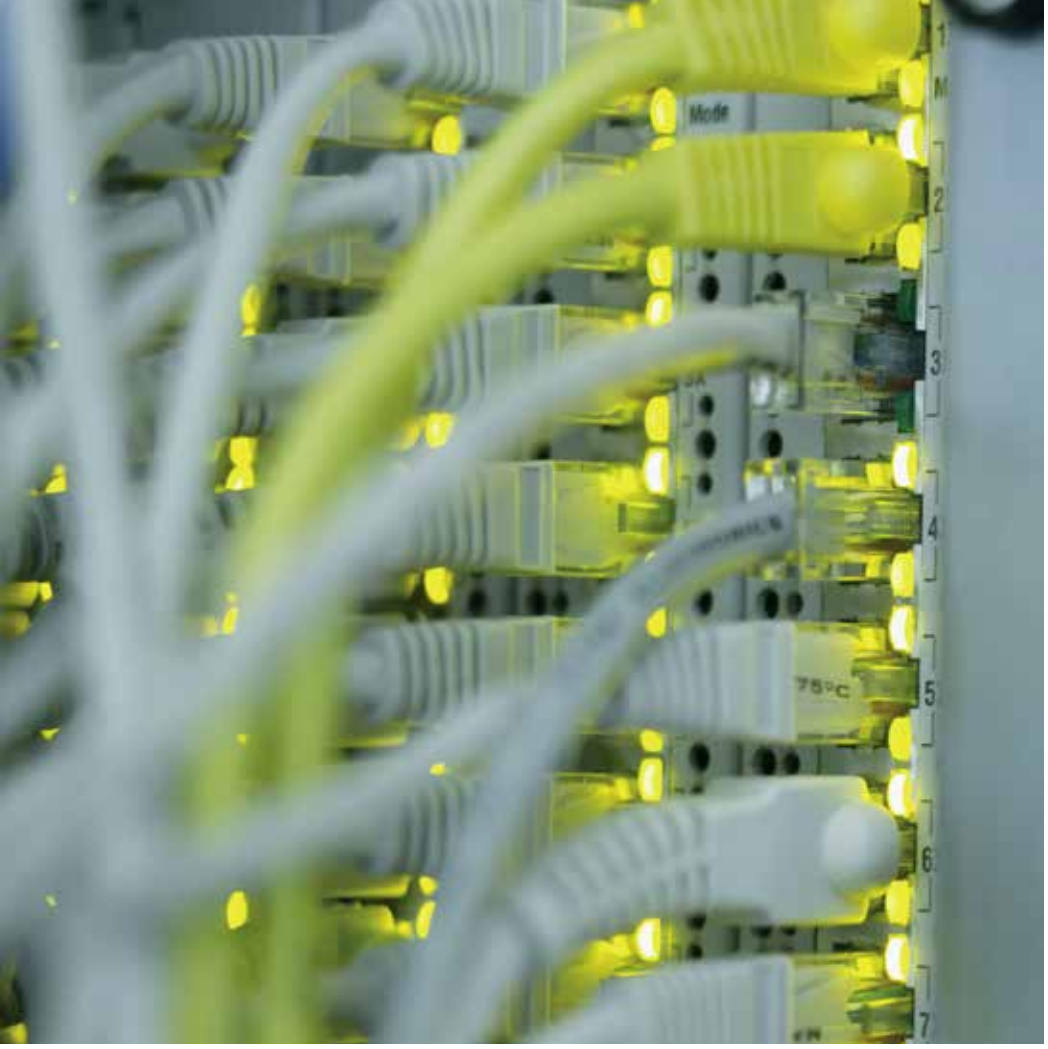
Reduce Risk

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

Product	Application	Dimension	Configuration	Color
Server				
Server Enclosure	Server (1500kg)	H (RMU) = 42 or 48 W (mm) = 600, 800 D (mm) = 870, 1070, 1170, 1200	Frame, rails (flush), locking sides, casters, top, full front door with swing handle, split rear doors with swing handle; PDU brackets	Black or white
	Server (1500kg) – No sides	H (RMU) = 42 or 48 W (mm) = 600, 800 D (mm) = 870, 1070, 1170, 1200	Frame, rails (flush), casters, top, full front door with swing handle, split rear doors with swing handle; PDU brackets	Black or white
Networking				
Network Enclosure	Network (800kg)	H (RMU) = 24 or 42U W (mm) = 600, 800 D (mm) = 800, 1000, 1100, 1200	Frame, rails, locking sides, casters, top, full front door with swing handle, split rear door with swing handle, PDU brackets	Black or white
Colocation				
Colocation Enclosure	Colocation (1500kg)	H (RMU) = 42 or 48U W (mm) = 600, 800 D (mm)= 1070, 1170, 1200	Frame, rails, locking sides, casters, top, full front door with combo lock, split rear door with combo lock, PDU brackets	Black or white
Key Accessories				
Air Dams	800mmW Enclosures	H = 42 or 48U	Air dam with blanking panels and grommets	Black or white
PDU Brackets	All Enclosures	H = 24, 42 or 48U	Additional PDU brackets for mounting on second side or for half height rack PDUs	Black
Vert. Cable Mgr	800mmW Enclosures	H = 42 or 48U	Cable rings, high density cable managers	Black
Horiz. Cable Mgr	All Enclosures	19"W, 1U, 2U	Cable rings, high density cable managers	Black
Shelving	All Enclosures	D = 600mm, 800mm, 1000mm	Fixed, Telescopic	Black
Fan Tray	Network Enclosures	D = 800mm, 1000mm, 1100mm	4-6 Fans per kit	Black
Bottom Plate	Server Enclosures	W = 600mm, 800mm D = 1100mm, 1200mm	Steel, fully contained	Black
Blanking Panel	All Enclosures	1U, 2U, 3U, 4U	Tool-less metal, Tool-less plastic	Black



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 dashboard

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

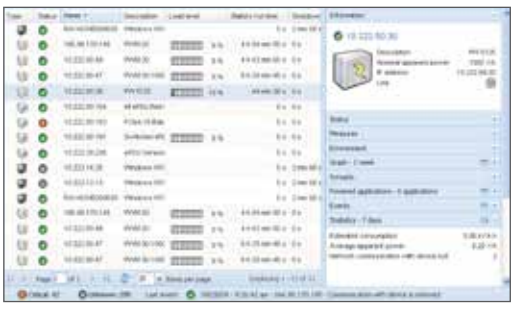
Intelligent Power Manager: software for extensive monitoring and management.

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)

Intelligent Power Protector and UPS Companion: shutdown software for extended power outages.



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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.

Network Card-MS

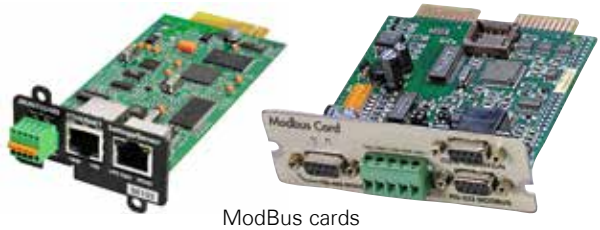
Relay Cards

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.

AS400 cards

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



ModBus cards

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.

Power Xpert Gateway Card

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 SPDV60/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

Become an Eaton Partner

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

Designer Tool-Kit

Back up power protection

Control & automation

Engineering services

Lighting & security

Power distribution & circuit protection

Structural solutions & wiring devices

Solutions for harsh & hazardous environments

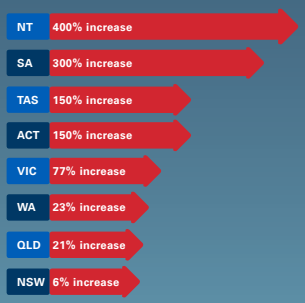
Snapshot of 2016 reported outages in:

Australia

2,635,666
PEOPLE AFFECTED

257
POWER OUTAGES

46% INCREASE IN POWER OUTAGES FROM 2015



TOTAL DURATION OF OUTAGES

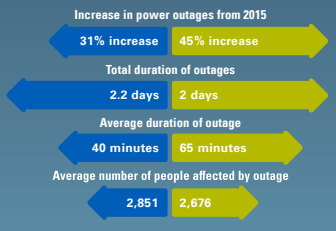
10,283 minutes

New Zealand

348,503
PEOPLE AFFECTED

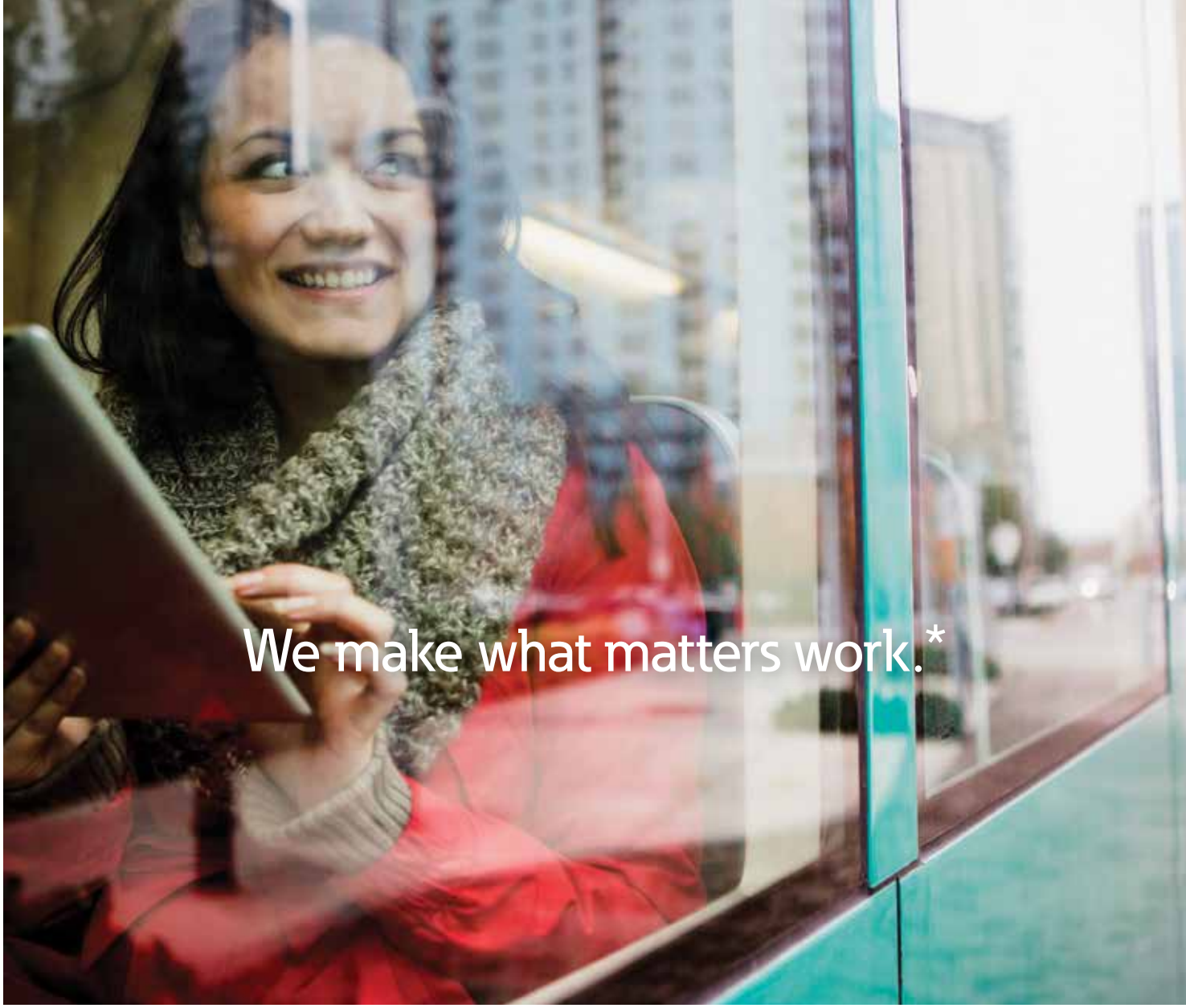
125
POWER OUTAGES

NORTH VS SOUTH



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

Powering Business Worldwide

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24 Hour Emergency Service Hotline
AUST 1300 303 059 NZ 0508 697 378

September 2017

AC Power: www.powerquality.eaton.com
DC Power: www.eaton.com/telecompower
Corporate: www.eatoncorp.com.au

030317PQ-MVB