

Backup and Power Protection Products



Powering Business Worldwide

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Power quality management & services

Increase efficiency without sacrificing uptime

Eaton offers a comprehensive portfolio of backup power and distribution equipment to help clients maintain business continuity and prevent downtime.

Our solutions protect against a host of threats, from power outages, surges and lightning strikes to cybersecurity attacks. Eaton also provides a suite of power management services and solutions to enable you to monitor and control your power infrastructure.

Our expertise and technology have led to the development of industry leading solutions that make the most efficient use of our client's own resources. With Eaton, you can rely on product compatibility with key applications from leading IT innovators including VMware, Red Hat and Microsoft, amongst others, to adapt your solutions to accommodate future IT technologies.

Segments

 Residential	 Healthcare	 Government	 Education	 Commercial
 Rail/Transport	 Telecom	 Industrial	 Mining	 Data centres

Offerings & Solutions



Backup Power UPS



DC Power Systems



Network Connectivity











Power Management Software

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
	3S600AU	600/360	(8) AUS 3 pin 10A	Fixed line cord 3 pin 10A AUS	Fixed line cord 3 pin 10A AUS	Power Board	USB	2 years	   
	3S850AU	850/510							
3S Mini	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	Form	Comms	Warranty	Applications
	3SM36AU	36 Watts	(4) Barrel adapters (9V/12V/15V/19V)	3 pin 10A AUS	3 pin 10A AUS	Power Board	N/A	2 years	 

5 SERIES LINE-INTERACTIVE UPS

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

	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	Form	Comms	Warranty	Applications						
	5E700UIAU	700/360	(2) AUS 3 pin 10A	Fixed line cord 3 pin 10A AUS	None	Tower	USB	2 years	   						
	5E900UIAU	900/480	(2) AUS 3 pin 10A												
	5E1200UIAU	1200/660	(3) AUS 3 pin 10A												
	5E1600UIAU	1600/900	(3) AUS 3 pin 10A												
5E2200UIAU	2200/1200	(3) AUS 3 pin 10A													
	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														
5SC (Rack)	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	EBM	Form	Comms	Warranty	Applications					
	5SC1500IR-AU	1500/1050	(8) IEC C13 10A	IEC C14 10A	(2) IEC 10A jumper, (1) AU 10A Input cable, USB, Serial	Yes (4)	Rack	USB/RS232/ Mini-slot	2 years	   					
	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	EBM	Form	Comms	Warranty	Applications					
	5SX1250RAU	1250	(8) IEC C13 10A	10Amp	AU 10A Input cable USB, Serial	Yes (4)	Tower/ Rack	USB/RS232/ Remote On/Off, Remote Power Off	2 years	   					
	5SX1750RAU	1750	(8) IEC C13 10A	16Amp	AU 16A Input cable USB, Serial										
5SX3000RAU	3000	(1) IEC C19 16A													
	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	Form	Comms	Warranty	Applications						
	5P650AUG2 (T)	650/520	Tower: (2) AUS 3 pin 10A - Remotely controlled (3) IEC C13 10A	AU 10Amp	AU 10A Input cable, USB, Serial	Tower/ Rack	USB/RS232/ Mini-slot	3 years	    						
	5P650IRAUG2														
	5P850AUG2 (T)														
	5P850IRAUG2	850/680	Rack: 650VA & 850VA	Tower: Fixed line cord 3 pin 10A AUS	Tower: USB, Serial										
	5P1150AUG2 (T)	1150/920	(2) Remotely controlled 1150VA & 1550VA							Rack: IEC C14 10A	Rack: (2) IEC 10A jumper USB, Serial				
	5P1150IRAUG2														
	5P1550AUG2 (T)														
5P1550IRAUG2	1550/1350	(6) IEC C13 10A (3) Remotely controlled													
5P Lithium Ion	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	Form	Comms	Warranty	Applications						
	5P1550GR-L	1550/1100	(6) IEC C13 10A. (3) Remotely controlled	IEC C14 10A	(2) IEC 10A jumper, USB, Serial	Rack	USB/RS232/ Mini-slot	5 years	    						
	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	EBM	Form	Comms	Warranty	Applications					
	5PX1500IRT2UAUG2	1500/1500	(8) IEC C13 (10A)	IEC C14 (10A)	(2) IEC 10A Jumper, USB, Serial	Yes(4)	Rack/Tower	USB/RS232/ Mini-slot	3 years	   					
	5PX2000IRT2UAUG2	2000/2000	(4) Remote Controlled												
	5PX2200IRT2UAUG2	2200/2200	(8) IEC C13 (10A)	IEC C20 (16A)	15 A AUS-IEC Input (2) IEC 10A jumper USB, Serial										
	5PX3000IRT2UAUG2	3000/3000	(2) IEC C19 (16A)												
5PX3000IRT3UAUG2	Remote Controlled 2 x IEC C13 (10 A) (2) IEC C13 (10 A) + 1 x IEC C19 (16A)														

Simplify

From Desktop to Data centre

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

Essential

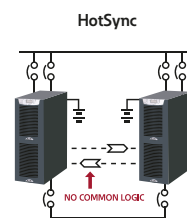
Superior

Premier

Innovate






























HotSync Technology

offers true wireless parallel capability and the elimination of a system-level single point of failure, resulting in higher system-level reliability.

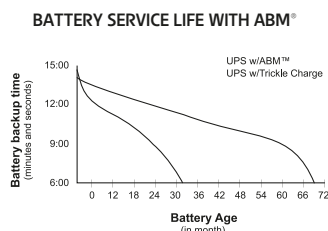


9 SERIES ONLINE UPS

Compatible Racks, ePDU's,
Software & Services Available

	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	EBM	Form	Comms	Warranty	Applications
	9E1000IAU	1000/800	(4) IEC C13 10A	IEC C14 10A	USB, Serial		Tower	USB/RS232/Mini-slot	1 year	  
	9E2000IAU	2000/1600	(6) IEC C13 10A	IEC C14 10A	USB, Serial		Tower	USB/RS232/Mini-slot		
	9E3000IAU	3000/2400	(6) IEC C13 10A, (1) IEC C19 16A	IEC C20 16A	AU 16A Input cable, USB, Serial		Tower	USB/RS232/Mini-slot	1 year	
	9E6KI	6000/4800	HW	HW	USB	Yes	Tower	USB		
	9E10KI	10000/8000								
	9E10KIXL	10000/8000								
	9E15KI	15000/12000								
	9E20KI	20000/16000								
9E20KIXL	20000/16000									
	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables		Form	Comms	Warranty	Applications
	9SX700I-AU	700/630	(4) AUS 3 pin 10A	IEC C14 10A	AU 10A Input cable, USB, Serial		Tower	USB/RS232/ Mini-slot	2 years	  
	9SX1000I-AU	1000/900	(4) AUS 3 pin 10A	IEC C14 10A	AU 10A Input cable, USB, Serial					
	9SX1500I-AU	1500/1350	(4) AUS 3 pin 10A	IEC C14 10A	AU 10A Input cable, USB, Serial					
	9SX2000I-AU	2000/1800	(5) AUS 3 pin 10A, (1) IEC C19 16A	IEC C14 10A	AU 10A Input cable, USB, Serial					
	9SX6KI-AU	3000/2700	(5) AUS 3 pin 16A, (1) IEC C19 16A	HW	AU 16A Input cable, USB, Serial					
		Part Number	VA/Watts	Outlet Qty & Type	Input	Cables				
9SX15KPMAU + (2) 9SXEBM480RT6U		15000/15000	HW, (6) IEC C13 10A, (3) IEC C19 16A with optional MBP	HW	USB, Serial		Rack/ Tower	USB/RS232/ Mini-slot	2 years	  
9SX20KPMAU + (2) 9SXEBM480RT6U		20000/20000								
	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables	EBM	Form	Comms	Warranty	Applications
	9PX1000IRT2U	1000/1000	(8) IEC C13 (10A)	10Amp	USB Serial Ext. Batt Comms cable	Yes (4)	Rack/ Tower	USB/RS232/ Remote On/Off, Remote Power Off/ Output Relay	3 years	    
	9PX1500IRT2U	1500/1500	(8) IEC C13 (10A)	10Amp						
	9PX2000IRT2U	2000/2000	(6) IEC C13 (10A), (2) AUS GPO (10A)	10Amp						
	9PX2200IRT2U	2200/2200	(8) IEC13 (10A), (2) IEC C19 (16A)	16Amp						
	9PX2200IRT3U	2200/2200	(8) IEC13 (10A), (2) IEC C19 (16A)	16Amp						
	9PX3000IRT2U	3000/3000	(8) IEC13 (10A), (2) IEC C19 (16A)	16Amp						
	9PX3000IRT3U	3000/3000	(8) IEC13 (10A), (2) IEC C19 (16A)	16Amp						
	Part Number	VA/Watts	Outlet Qty & Type	Input						
	9PX1500IRTANZ-L	1500/1500	(8) IEC C13 (10A)	10Amp	USB Serial	Yes (4)	Rack/ Tower	USB/RS232/ Remote On/Off, Remote Power Off/ Output Relay	5 years	    
	9PX2000IRT2U-L	2000/1800	(8) IEC C13 (10A), (2) AUS GPO (10A)	10Amp	AUS Input cable 10A					
	9PX3000IRTANZ-L	3000/2400	(8) IEC C13 (10A), (2) IEC C19 (16A)	16Amp	USB Serial AUS Input cable 16A			USB/RELAY/RS232/ Mini-slot, DB9 (4) Dry Contacts/DB15 Parallel		
	9PX6KIRTN-L	6000/5400	HW (2) IEC C19 (8) IEC C13	HW	USB Serial Cable retention bracket (6kVA)					
	Part Number	VA/Watts	Outlet Qty & Type	Input	Cables					
	9PX5KI	5000	HW (2) IEC C19 (8) IEC C13	HW	USB Serial Cable retention bracket (6kVA)	Yes (4)	Rack/ Tower	USB/RELAY/ RS232/ Mini-slot DB9 (4) Dry Contacts / DB15 Parallel	3 years	   
	9PX6KI	6000/5400	HW (2) IEC C19 (8) IEC C13	HW	USB Serial Cable retention bracket (6kVA)	Yes (4)	Rack/ Tower			
	9PX8KiPM + 9PXEBM240	8000/7200	HW							
	9PX11KiPM + 9PXEBM240	11000/10000	HW + (4) IEC C19 16A with optional MBP							

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



Connect

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-  Register a Product (Warranty)
-  Download Software, Drivers & Firmware
-  Designer Tool-Kit
-  Order a Catalogue



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Sign up today by visiting:
www.poweradvantage.eaton.com

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



Power Failure

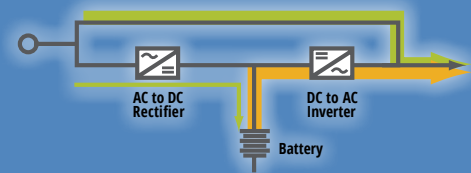


Power Sag



Power Surge

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



Series

5

Line Interactive UPS: Keeping it smooth



Power Failure



Power Sag



Power Surge

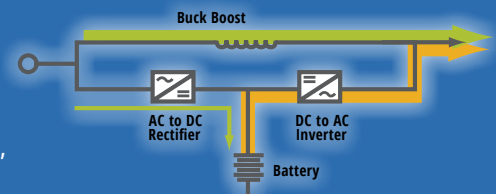


Under-voltage



Over-voltage

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



Power Failure



Power Sag



Power Surge



Under-voltage



Over-voltage



Line Noise



Frequency Variation

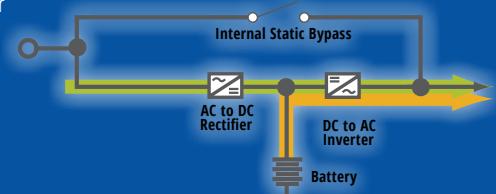


Switching Transient



Harmonic Distortion

Eaton's Series 9 UPS 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.

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 realise 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 and 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 replaced to prevent problems through oxidation. Finally, the battery system is tested under normal operating conditions.

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 Enquiries

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: eeshelpdesk@eaton.com



Eaton's Extended Warranty and Service Plans

Eaton's Extended Warranty and Service Plans (ESP) provide customers with a cost effective and hassle-free warranty uplift and service enhancements for Eaton's single phase UPS products.

Available in two options, the Standard offer covers up to the 5th year and business hour support. Strategically designed for the most critical IT assets, our Premium offer includes start up, commissioning and 24/7 support.

Contact our Service Support team at **1300 877 877** or email Eatonanz@eaton.com for more information.

Inclusions	Standard	Premium
Applicable products 3S, 5E, 5S, 5SC, 5SX, 5P, 5PX, 9E, 9SX, 9PX	Single Phase UPS (excludes 9155, 91PS)	Hardwired Single Phase UPS (excludes 9155, 91PS)
Warranty Uplift	3rd, 4th or 5th year	3rd, 4th or 5th year
Same business day dispatch and advance replacement of UPS, power modules, and battery packs ¹	Included	Included
Next business day response onsite ²	Included	Included
Collection and disposal of faulty unit ³	Included	Included
Start-up/commissioning ⁴	-	Included
Access to Eaton Customer Service Support centre	8x5	24/7

Terms and Conditions

- Same business day dispatch of Eaton UPS with single phase output (excludes 9155 and 91PS) with Advance Replacement and all logistics nationally.
 - Softwired Eaton UPS ≤3kVA is the customers responsibility to re-install.
 - Hardwired Eaton UPS >3kVA with single phase output (excludes 9155 & 91PS) replacement parts will be dispatched to site in advance or taken with the Service technician at the next business day onsite response².
 - The cut off time for dispatch is 2:00 p.m. AEST/AESDT, Mon-Fri.
- Next Business Day response by Eaton Technician/Authorised Agent for hardwired Eaton UPS >3kVA with single phase output (excludes 9155 & 91PS) to attend to fault is only applicable for locations up to 60km from a metro state capital. 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.
- 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.
- Initial start up to be conducted during normal business hours.
- 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.
- Extended Warranty registration can be done via www.pqproductregistration.eaton.com/au/en-au/login.html. Registration will be required within 30 days from date of Warranty Uplift purchase. A confirmation email will be provided to the customer upon registration, for further information and scheduling details where applicable.

Download [Eaton's Standard Warranty Statement](#)

A photograph of a modern hospital building at night. The building features a large glass facade with multiple floors. The windows are illuminated from within, and horizontal light strips are visible between the window bands. A prominent sign on the building reads "HOSPITAL" in large, white, illuminated letters. Below this, a section of the building is labeled "EMERG" in large, white, illuminated letters. The entrance area is visible at the bottom, showing a glass-fronted structure with interior lighting. The sky is dark blue, and the overall scene is lit by the building's own lights.

HOSPITAL

EMERG

A photograph of a modern building at night, featuring a glass facade and illuminated balconies. A semi-transparent green rectangular overlay is positioned in the upper half of the image, containing white text. The building's lower section has a large sign that reads 'AGENCY' in white capital letters on a dark background. The sky is dark blue, and the overall scene is lit with warm artificial lights from the building and streetlights.

Single Phase UPS

Critical protection for:
Healthcare, Education, IT Networks,
Small Data Centres, Home Offices,
Commercial, and SMB

AGENCY

Eaton 3S UPS



Technology: Series 3 (Standby)
Rating: 600 & 850VA
Voltage: 240V
Runtime: Typically 5 min
Configuration: Power board style

Full protection

- Eaton 3S supplies battery backup power during outage and advanced surge protection to prevent damage from lightning strikes or accidental grid surge
- If power outage lasts longer than expected, Eaton software will gracefully shutdown your computer without losing any data
- Eaton 3S also integrates RJ11/xDSL connection to protect Internet gateways from perturbation through data line (850VA models).

Modern usage and easy integration

- Compact and appealing design with glossy finish will perfectly fit in any modern residential or office environment
- Eaton 3S 850VA offer two 2A USB ports to charge any mobile devices (mobile phone, tablet, etc..)
- To facilitate installation, wall mounting system is implemented on all models.

Peace of mind

- Surge protection circuits are compliant with IEC 61643-11 international standard
- 10A circuit breaker protects your equipment from overload (all models).

Ideal for protecting

- Computers, peripherals and multimedia
- TV, video and Hi-Fi equipment: Home cinema, NAS, digital decoders, etc
- Internet gateways
- Gaming console
- Broadband modems (Internet and TV) & IP telephony
- Household goods, etc

Technical Specifications	Eaton 3S 600	Eaton 3S 850
Rating (VA/W)	600VA/360W	850VA/510W
Connection		
Output connection	4 outlets with battery backup and surge protection + 4 outlets with surge protection	
Electrical characteristics		
Nominal input voltage	220 - 240 V	
Input voltage range	Up to 168-295 V (adjustable)	
Output voltage	240V (adjustable to 220V/230V/240V)	
Input frequency range	50 / 60 Hz (46 - 65 Hz working range)	
Input protection	10A resettable circuit breaker	
Battery		
Battery type	Compact, sealed lead acid battery (replaceable)	
Battery test	Yes	
Cold start (no mains power)	Yes	
Deep-discharge protection	Yes	
Battery replacement indicator	LED	
Desktop PC*	16 min	20 min
Gaming PC / Workstation*	6 min	9 min
Features		
Communication	USB port (HID-compliant) for automatic integration with most common operating systems (Windows & Mac OS)	
USB charge	-	2 USB ports (2A max)
Phone/xDSL line protection	-	Yes
Operating conditions, standards and approvals		
Operating temperature	0 to 40°C	
Operation elevation	0 to 3000m	
Compliances	IEC 62040-1; IEC 62040-2 C2; IEC 62040-3; IEC 62040-4; IEC 61643-11	
Conformity	CE / RCM	
Dimensions W x H x D / weight		
UPS dimensions (mm)	325 x 86 x 140	335 x 86 x 170
UPS weight (kg)	3.2	4.3

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

Eaton 3S Mini UPS



Technology: Eaton DC UPS
Rating: 36W
Voltage: 240V
Runtime: Up to 5 hours
Configuration: Power board style

Designed to keep you connected

- Keep your critical connected equipment (Internet gateway, IP camera, Smart-home controller, personal assistant, etc..) up and running in the event of a power outage
- Maintain your ability to remote control your connected devices with no loss of power (IP cameras)
- Overcurrent protection through internal circuit.

Adaptable

- Select from 4 output voltages that are compatible with any critical application power needs and 4 output connector types to adapt to your equipment requirements
- Simple Easy to read LED indicator providing information about selected output voltage and remaining battery capacity
- Cold-start function available to use 3S Mini as a battery bank.

Compact and silent

3S Mini replaces the power supply provided with your device, to insure power protection without additional equipment. The super compact, silent and stylish design ensures the 3S Mini blends well into your home or business environment.

Ideal for protecting

- IP Camera
- TV player & Gaming console
- Wifi Extender
- Basic/Advanced Internet gateway

Technical Specifications

Input voltage	90-264V AC
Input frequency	50/60Hz
Output voltage/Amps	9V/3A - 12V/3A - 15V/2,4A - 19V/1,89A
Output connection	Barrel adaptors (5.5 x 2.5 / 5.5 x 2.1 / 4.75 x 1.7 / 3.5 x 1.35)
Power rating	36W
Battery type	Li-Ion
Battery capacity	3.7 V/2200 mAh x 2
UPS dimensions W x H x D	95.5 x 30 x 136 mm
UPS weight	0.4 kg
Operating temperature	0 - 35°C
Safety	IEC 62477-1, CE mark, CB report
EMC	IEC 62040-2
Warranty	2 years

Eaton 5E Gen2



Technology: Series 5 (Line Interactive)
Rating: 700/ 900/ 1200/ 1600/ 2200
Voltage: 2000VA 230V
Backup Time: Typical 5 min
Configuration: Tower

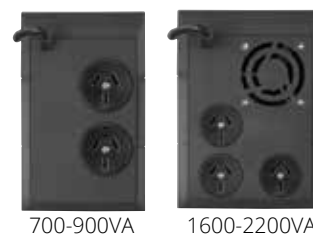
The 5E line interactive uninterruptible power system (UPS) provides affordable power protection for your personal computers, home, office and other electronic devices. While packed with valuable features such as ANZ power receptacles and USB communications, the compact size is ideal for limited office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

Features

- Eaton 5E Gen2 UPS protects application and data against power loss.
- Double-boost Automatic Voltage Regulation (AVR) technology regulates grid fluctuations (under and overvoltage) to save battery power in the event of power outage.
- A wide product range covers the power requirements of many IT devices.
- Fanless design up to 1200VA ensures silent operation in residential settings.
- Compact housing makes it easy to integrate in home or office.
- Start-on-battery provides portable power capability.

Ideal for protecting

- Computers and peripherals
- POS equipment



700-900VA

1600-2200VA

Technical Specifications	700	900	1200	1600	2200
Rating (VA/W)	700VA/360W	900VA/480W	1200VA/660W	1600VA/900W	2200VA/1200W
Electrical Characteristics					
Technology	Line-interactive				
Input nominal voltage	220 - 240 V				
Input voltage windows without using battery	140 - 300 V				
Output voltage	230V				
Input frequency range	50 / 60 Hz (45 - 65 Hz working range)				
Connection					
Number of AUS outlets	2		3		
Battery					
Typical backup time for 1 PC	14 min	24 min	40 min	42 min	52 min
Typical backup time for 2 PC	5 min	8 min	15 min	19 min	32 min
Typical backup time for 3 PC		-	6 min	8 min	17 min
Typical backup time for 4 PC		-	-	-	10 min
Battery management	Constant battery recharge, cold start				
Communication					
Communication port	1 USB port				
Eaton UPS Companion software	Available on eaton.com/downloads				
Operating conditions, Standards and Approvals					
Operating temperature	0 to 40°C				
Noise level	< 25dBA			<25dBA (line mode) <40dBA (battery or AVR mode)	
Certifications	EN IEC 62040-1:2019; EN 62040-2:2006; IEC 62040-2: 2016, IEC 62040-3: 2021; CE; C-tick				
Dimensions D x H x W / Weight					
UPS Dimensions (mm)	288x148x100			330x180x133	
UPS Weight (kg)	4.4	5.3	8.5	9.3	9.8
Customer Service & Support					
Warranty	2 years;				

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

Part Numbers	700	900	1200	1600	2200
5E Gen 2	5E700UiAU	5E900UiAU	5E1200UiAU	5E1600UiAU	5E2200UiAU

In the interests of continuous product improvement, all specifications are subject to change without notice.



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 a 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



Technical Specifications					
Rating (VA/W)	550VA/330W	700VA/420W	850VA/510W	1200VA/750W	1600VA/1000W
Electrical characteristics					
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, RCM				
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.

Eaton 5SC Short Depth Rack UPS



Technology: Series 5 (Line Interactive)
Rating: 1500VA
Voltage: 240 V
Backup Time: Typical 6 min
Configuration: 2RU rack mount

Ideal for protecting

- Rack or tower servers
- NAS, network equipments
- ATMs, ticket machines, kiosks

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 5SC 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 on rack and R/T models. Eaton's Intelligent Power® Software Suite insures compatibility with all major OS including virtualisation software.

Reliability

- Pure sinewave output: When operating in battery mode the 5SC provides a high quality output signal for any sensitive equipment connected, such as active PFC (power factor corrected) servers
- 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%.

Flexibility

- Designed to fit into short depth wall enclosures down to 500mm, 2 post racks or to be wall mounted
- Rail kits and ANZ Input cord are included as standard
- Easy battery replacement from front panel to extend UPS life.

Technical Specifications	
Rating (VA/W)	1500VA/1050W
Format	Rack 2U
Electrical characteristics	
Technology	Line Interactive High Frequency (Sinewave, Booster, Fader)
Input voltage range	184 to 276 V
Output voltage and frequency	230V (-10/+6%) (Adjustable to 220/230/240 V), 50/60 Hz ± 1Hz (Autosensing)
Connections	
Input	1 IEC C14 (10A)
Outputs for Rack or R/T models	8 IEC C13 (10A)
Batteries	
Typical backup times at 50 and 70% load*	13/8 min
Battery management	ABM, automatic battery test, deep discharge protection
Communication	
Communication ports	1 USB port + RS232 serial port (USB and RS232 cannot be used simultaneously) ROO/RPO + card slot for Network-M2 card or Relay-MS card
Operating conditions, standards and approvals	
Operating temperature	0 to 40°C
Noise level	<45dB
Safety	IEC/EN 62040-1, UL1778
EMC	IEC/EN 62040-2
Approvals	CE /CB report (TUV), cTUVus, RCM
Dimensions and weight	
Dimensions H x W x D	86.2 x 440 x 405 mm
Weight	17.8kg
Customer service and support	
Warranty	2 years

* Runtimes are shown @ 0.7 power factor. Backup duration is approximate and may vary with equipment, configuration, battery age, temperature, etc.
In the interests of continuous product improvement all specifications are subject to change without notice.

Eaton 5P Gen2

- 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).

Secure, smart, and integrated

The Eaton 5P Gen 2 UPS together with the cybersecured gigabit network card included in the Netpack versions), meet stringent cybersecurity standards. Remote management features offer secure UPS configuration and firmware updates, while the Brightlayer Software Suite provides seamless integration with virtualisation environments and cloud services, ensuring continuous service and integrity.

Power and efficiency in a compact design

Enhance your operations with the Eaton 5P Gen 2 UPS, delivering up to 1350 Watts—22% more power than its predecessor and 35% above competitors—in a compact 1U form factor. It ensures stable, high-quality output for sensitive equipment and increased efficiency, reducing energy consumption and costs. Intelligent load segment control prioritises critical devices and optimises battery runtime.

Optimised battery management, easy maintenance, total flexibility

Benefit from a prolonged battery life (up to 50%) and machine learning predictive maintenance with Eaton's ABM+ technology. User hot-swappable batteries and intuitive battery replacement wizard through graphical LCD display. Whether with the 1U rack format or a compact tower option, the Eaton 5P Gen 2 UPS fits to your space requirements, ensuring compatibility for various setups.

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 Gen2

Technical Specifications	650	850	1150	1550
Rating (VA/W)	650VA / 520W	850VA / 680W	1150VA / 920W	1550VA / 1350W
Format	Tower or Rack 1U	Tower or Rack 1U	Tower or Rack 1U	Tower or Rack 1U
Electrical Characteristics				
Technology	Line-Interactive High Frequency (Pure Sinewave, Booster + Fader)			
Input nominal voltage	200V-240V			
Input voltage range without using batteries	160V-294V (adjustable to 150V-294V)			
Input frequency range without using batteries	47 to 70 Hz (50 Hz system), 56.5 to 70 Hz (60 Hz system), 40 Hz in low-sensitivity mode			
Output voltage	230V (+6 / -10%) (Adjustable to 200V / 208V / 220V / 230V / 240V), 50 / 60 Hz + / - 0.1 Hz (autosensing)			
Connections				
Input	IEC C14 (10A)			
Outputs Tower models	2 AU 10A, 3 IEC C13 (10A)	2 AU 10A, 3 IEC C13 (10A)	2 AU 10A, 3 IEC C13 (10A)	2 AU 10A, 3 IEC C13 (10A)
Outputs Rack 1U models	4 IEC C13 (10A)	4 IEC C13 (10A)	6 IEC C13 (10A)	6 IEC C13 (10A)
Switched outlets groups	2 outlet groups			
Batteries				
Typical backup times *				
200W	12	26	34	56
300W	5.5	15	19	35
400W	3	10	13	24
600W		5	7.5	14
800W			4	8
1000W				5
Battery management	Eaton ABM + or constant voltage charging method (user selectable), enhanced battery life time prediction based on usage conditions, battery exchange wizard, automatic battery test, deep discharge protection			
Interfaces				
Communication ports	1 USB port + 1 serial RS232 port and relay contacts (USB and RS232 ports cannot be used simultaneously), 1 mini-terminal block for Remote ON/OFF and Remote Power OFF			
Communication slot	1 slot for Network-M3, INDGW-M2 or Relay-MS cards			
Operating conditions, Compliances and Certifications				
Operating temperature	0 to 40°C			
Noise level	<30 dB @ typical load			<35dB @ typical load
Safety	IEC/EN 62040-1, UL1778, CSA22.2			
EMC, Performance	IEC/EN 62040-2, IEC / EN 62040-3, FCC Class B, CISPR 32 Class B			
Approvals	CE / CB report (TUV) / cTUVus / UKCA / Ukr / Cm			
EcoDesign	RoHS, REACH, WEEE, Packaging directive, Battery directive, PEP Ecopassport			
Dimensions W x D x H / Weight				
Tower models	150x345x233mm / 7.9kg	150x345x233mm / 10.2kg	150x345x233mm / 11kg	150x445x233mm / 15.1kg
Rack 1U models	438x361x43.2mm / 8.6kg	438x509x43.2mm / 13.7kg	438x509x43.2mm / 14.2kg	438x555x43.2mm / 18.7kg
Customer Service & Support				
Warranty	3 years on electronics			
* Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc.				
Part Numbers	650	850	1150	1550
Tower models	5P650AUG2	5P850AUG2	5P1150AUG2	5P1550AUG2
Rack 1U models	5P650iRAUG2	5P850iRAUG2	5P1150iRAUG2	5P1550iRAUG2

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

Part Numbers	650	850	1150	1550
Tower models	5P650AUG2	5P850AUG2	5P1150AUG2	5P1550AUG2
Rack 1U models	5P650iRAUG2	5P850iRAUG2	5P1150iRAUG2	5P1550iRAUG2

In the interest of continuous product improvement, all specifications are subject to change without notice.

Eaton 5P Lithium-ion rackmount UPS



Technology: Series 5 (Line Interactive)
Rating: 1550VA
Voltage: 240V
Battery type: Lithium Ion Internal only
Configuration: 1U rack mount

Progression in battery technology and remote management come together to make the 5P Lithium-ion rackmount UPS a necessity for edge computing environments. The lithium-ion UPS' "set it and forget it" value proposition allows IT managers to easily deploy the 5P without the maintenance and refresh challenges of a UPS utilising lead-acid batteries.

Building on the success of the 5P UPS platform, Eaton has reduced the weight, improved battery life and lengthened our warranty. These added benefits, in combination with the extended life of the product, provide IT managers with the opportunity to align their UPS refresh cycles with the rest of the IT stack, saving time and money spent on labour and replacement batteries.

Value-added benefits for the 5P Lithium-ion:

Performance

2-3X longer battery lifespan allows users to "set it and forget it"—a perfect value-add for remote edge environments.

Resiliency

3X faster recharge following power disruptions reduces vulnerability and improves uptime.

Safety

On-board battery management system (BMS) monitoring in combination with proven Lithium Iron Phosphate (LiFePO4) chemistry provides a reliable and safe offering.

Intelligence

BMS provides up-to-date insight into battery performance, charge cycles and active temperature monitoring to keep the user informed on the lifecycle of their UPS battery.

Installation

Lightweight design that is 20% less weight than a comparable lead-acid UPS in combination with versatile mounting options allow for ease of deployment.

Guarantee

5 year all-inclusive (electronics and battery) warranty, provides peace of mind for customers.

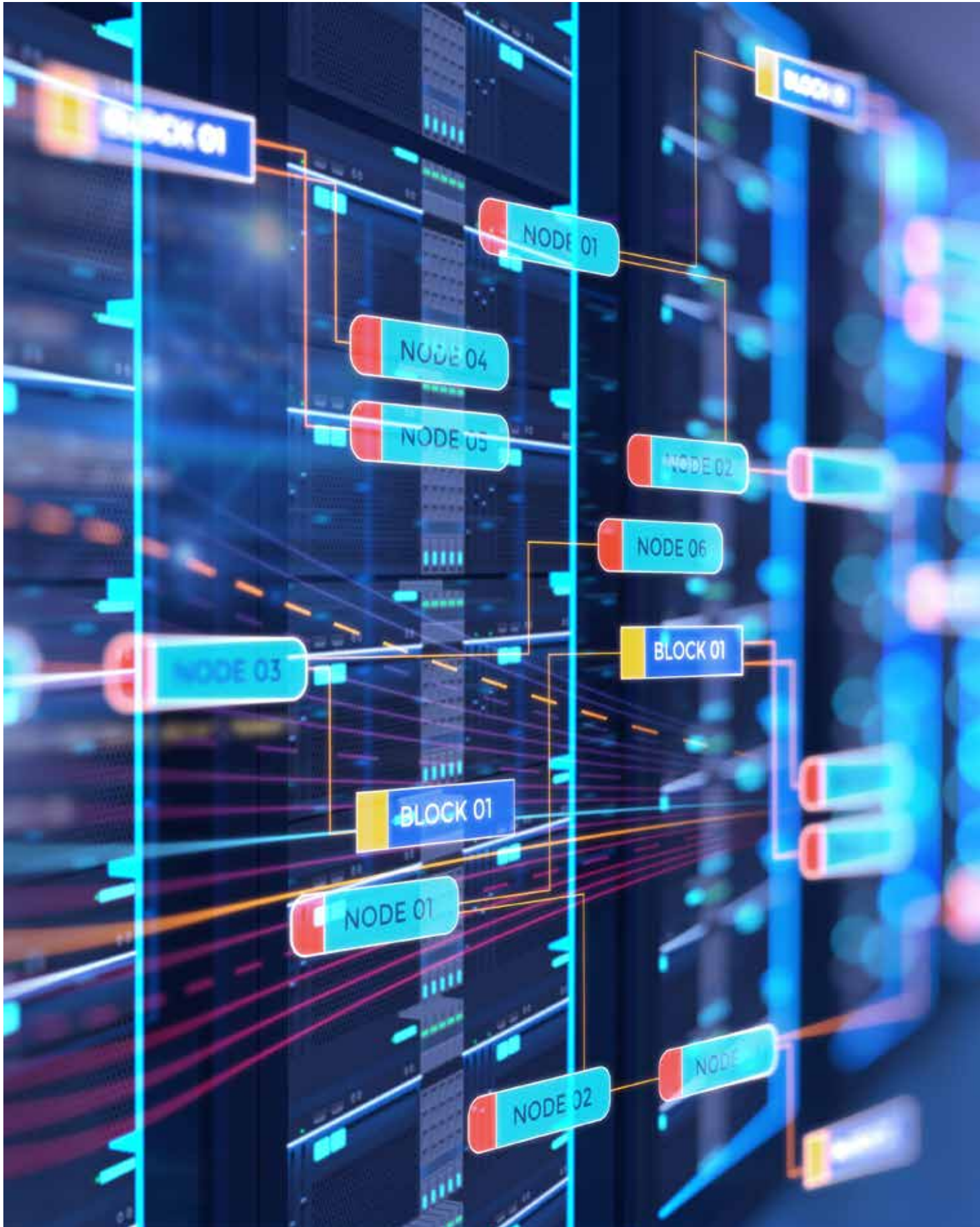
5P Lithium-ion Rackmount Selection Guide

Catalogue number	Description	Rating (VA/watts)	Input connection	Output receptacles	Dimensions (H x W x D), mm	Net weight, kg
1U Global Rackmount, 208V/230V, 50/60Hz model						
5P1550GR-L	5P 1550VA Lithium-ion UPS	1550/1100	C14	(6) C13	43.18 (1U) x 436.88 x 553.72	16.33

*Due to continuous product improvement programs, all specifications are subject to change without notice. Please visit Eaton.com/5Prm to view complete and updated product specifications, including complete battery runtimes.

5P Lithium-ion Options

Catalogue number	
Connectivity	Description
NETWORK-M2	Gigabit Network Card
EMPDT1H1C2	Environmental Monitoring Probe (EMP) Gen 2 for use with Network-M2
RELAY-MS	Relay / Serial Interface Card
Mounting hardware	
5PRACKKIT1U	1U two-post rail kit (optional)



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 ensures compatibility with all major OS including virtualisation software.

Flexibility

- R/T models authorise 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

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 sinewave 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°C		
Noise level	<40db		
Regulations	EN62040-2, EN61000-4		
Dimensions D x H x W / weight			
Dimensions (mm)	522x441.2x86.2(2U)		647x441.2x86.2(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.

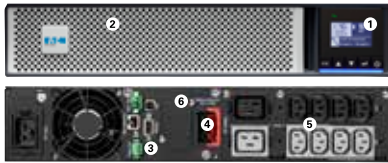
** Based on 100% load

Eaton 5PX Gen 2 UPS

1500W, 2000W, 2200W, 3000W



Rack/Tower versatility



Eaton 5PX Gen 2 2200i RT2U

- 1 Graphical LCD display:
 - Clear information on UPS status and measurements
 - Enhanced configuration capabilities
 - Available in 9 languages
- 2 Panel for batteries replacement (hot-swappable)
- 3 1 USB port + 1 serial port + remote ON/OFF and remote power OFF inputs + output relay
- 4 External battery (EBM) connector
- 5 8 IEC 10 A + 2 IEC 16 A sockets with energy metering (including 5 remote controlled sockets)
- 6 Communication card slot



Intuitive LCD display for ease of configuration and management



Advanced protection for:

- Servers
- Switches
- Routers
- Storage devices

Exceptional efficiency, manageability and energy metering capabilities for IT managers

Performance and efficiency

- With unity power factor output ($W=VA$), Eaton 5PX Gen 2 provides 11% more power than other UPS in its class, protecting more servers with a single unit.
- Energy Star 2.0 certified, 5PX Gen 2 offers best-in-class efficiency performance to reduce energy consumption and cooling costs.
- When operating in battery mode the 5PX provides a high-quality output signal for any sensitive equipment connected, such as active PFC (power factor corrected) servers.
- Each 5PX Gen 2 battery configuration provides the best size/ runtime ratio.

Management and Cybersecurity

- Innovative graphical LCD display brings all operating information at a glance. It also enhances commissioning and configuration capabilities.
- 5PX Gen 2 is compatible with Eaton's Gigabit network management card, which provides Dual cybersecurity certifications (UL 2900-1 & IEC 62443-4-2) and enables connection to remote monitoring solutions safely.
- Together with 5PX Gen 2, Eaton Gigabit network management card allows both remote UPS settings and remote firmware upgrade to ensure easy deployment (fleet management) and reduced maintenance cost.
- 5PX Gen 2 monitors energy consumption right down to the managed outlet groups. kWh values can be monitored using the LCD or Eaton's Intelligent Power Software.
- Eaton's Intelligent Power Software seamlessly integrates with leading virtualisation environments and cloud orchestration tools.

Availability and flexibility

- 5PX Gen 2 3000VA 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.
- 5PX Gen 2 Load segment control enables prioritised shutdowns of non-essential equipment to maximise battery runtime for critical devices (2 groups).
- Eaton ABM® battery management technology uses a three-stage charging technique that optimises battery health and extends lifetime by up to 50%.
- Up to 4 external hot-swappable battery modules can be added for longer power availability.

Eaton 5PX Gen 2 UPS

Technical Specifications	1500	2000	2200	3000		
Rating (VA/W)	1500VA/1500W	2000VA/2000W	2200VA/2200W	3000VA/3000W		
Format	RT2U (tower/rack 2U)	RT2U (tower/rack 2U)	RT2U	RT2U or RT3U		
Electrical Characteristics						
Technology	Line-Interactive High Frequency (Pure Sinewave, Booster + Fader)					
Input voltage range without batteries	160V-294V (adjustable to 150V-294V)					
Input frequency range without batteries	47 to 70 Hz (50Hz system), 56.5 to 70Hz (60Hz system), 40Hz in low-sensitivity mode					
Output voltage	230V (+6/-10%)(Adjustable to 200V*/208V/220V/230V/240V), 50/60 Hz +/-0.1 Hz (autosensing)					
Connections						
Input	IEC C14 (10A)	IEC C14 (10A)	IEC C20 (16A)	IEC C20 (16A)		
Output	8 IEC C13 (10A)	8 IEC C13 (10A)	8 IEC C13 (10A) 2 IEC C19 (16A)	8 IEC C13 (10A) 2 IEC C19 (16A)		
Remote controlled sockets	2 groups of 2 IEC C13 (10A)		1 group of 2 IEC C13 (10A) 1 group of 2 IEC C13 (10A) + 1 IEC C19 (16A)			
Batteries						
Typical Backup Times**	300W	500W	800W	1200W	1800W	2500W
5PX 1500	44	24	13	7		
5PX 1500 + 1 EBM / 4 EBM	164/611	92/346	53/199	33/123		
5PX 2000	50	28	16	9	4	
5PX 2000 + 1 EBM / 4 EBM	242/958	138/551	80/319	49/197	30/121	
5PX 2200	50	28	16	9	4	
5PX 2200 + 1 EBM / 4 EBM	242/958	138/551	80/319	49/197	30/121	
5PX 3000	68	39	23	13	7	4
5PX 3000 + 1 EBM / 4 EBM	255/950	146/546	86/323	54/201	33/124	22/84
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 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-M2, INDGW-M2, or RELAY-MS cards					
Operating conditions, standards and approvals						
Operating temperature	0 to 40°C					
Noise level	<40 dB @ typical load					
Safety	IEC/EN 62040-1, UL1778, CSA22.2					
EMC, Performance	IEC/EN 62040-2, FCC Class B, CISPR22 Class B					
Approvals	CE / CB report (TUV) / cTUVus / EAC / UKCA / Ukr / Cm / RCM					
Dimensions W x D x H / Weight						
UPS Dimensions (mm)	438x448x85.5	438x603x85.5	438x603x85.5 (RT2U)	438x603x85.5 (RT2U) 438x483x129 (RT3U)		
UPS Weight (kg)	22.4	28	28.2 (RT2U)	31.7 (RT2U) / 31.1 (RT3U)		
EBM dimensions (mm)	438x448x85.5	438x603x85.5 (RTU2) 438x483x129 (RT3U)	438x603x85.5 (RT2U) 438x483x129 (RT3U)	438x603x85.5 (RT2U) 438x483x129 (RT3U)		
EBM weight (kg)	27.8	40.4 (RT2U)/39.7 (RT3U)	40.4 (RT2U)/39.7 (RT3U)	40.4 (RT2U) / 39.7 (RT3U)		
Customer Service & Support						
Warranty	3 years (See ANZ Warranty Statement)					

*5% derating @ 200V

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

Part Numbers*	1500	2000	2200	3000
UPS RT2U	5PX1500IRT2UAUG2	5PX2000IRT2UAUG2	5PX2200IRT2UAUG2	5PX3000IRT2UAUG2
UPS RT3U				5PX3000IRT3UAUG2
EBM RT2U	5PXEBM48RT2UG2	5PXEBM72RT2UG2	5PXEBM72RT2UG2	5PXEBM72RT2UG2
EBM RT3U			5PXEBM72RT3UG2	5PXEBM72RT3UG2

In the interest of continuous product improvement, all specifications are subject to change without notice.

* All 5PX UPS and EBM are delivered with rack kit

Eaton 9E UPS



9E 10kVA



LCD display for clear information on the UPS' status and measurements

Advanced protection for:

- ATM
- Infrastructure
- Industrial and Medical IT
- Networking
- Storage
- Telecom
- Transportation

Essential Online UPS

Reliability and performance

- The Eaton 9E constantly monitors power conditions and regulates voltage and frequency due to the online double conversion topology.
- Power more servers than most similar UPSs due to a 0.8 power factor.
- Trust a leading manufacturer with decades of experience and high quality standards: CE compliance certified by external agency (CB report from the TUV).

Manageability

- Get clear information on the UPS' status and measurements (load level, battery level, input/output voltage and frequency) on a single screen with the new LCD interface.
- Easily communicate with the UPS through USB, RS232 serial or over the network with the optional network card (Network-M2). Relay cards or Modbus cards are also available.
- Integrate 9E into all software environments. The Eaton 9E is delivered with Eaton's Intelligent Power® Software and is compatible with all major OS including advanced integration in VMware vCenter and Microsoft Hyper-V.

Flexibility

- The internal bypass allows service continuity in case of an internal fault. A maintenance bypass is also available at 6kVA and above as standard for easy maintenance of the UPS without powering down critical systems.
- Make your installation more flexible with a combo input (3:1 and 1:1) on the 10kVA, 15kVA, and 20kVA.
- Extend runtime as you like by adding up to 4 external battery modules (EBM) for 2kVA and above. For extra-long runtime, XL models with internal supercharger are also available at 3kVA, 10kVA and 20kVA.

9E 1-3kVA

Technical Specifications	1500VA	2000VA	3000VA	3000VA XL
Rating (VA/W)	1000VA/800W	2000VA/1600W	3000VA/2400W	3000VA/2400W
Format	Tower			
Electrical Characteristics				
Technology	Online double conversion			
Input Voltage	208/220/230/240V			
Input voltage range without using batteries	176-300V without derating (up to 100-300V with derating)			
Output Voltage	208/220/230/240V±1%			
Output THDU	THDU: <2% for 100% linear load, <6% for 100% non-linear load			
Input frequency range	40Hz-70Hz, 50/60Hz autoselection			
Efficiency	up to 91% in online mode, up to 97.5% in high efficiency mode(ECO mode)			
Overload capacity (in on-line mode)	105%-130%: 60s, 130%-150%: 10s, >150%: ≥300ms			
Recharge time to 90% battery capacity	4 hours	4 hours	4 hours	depends on external battery
Extendable backup time	NA	YES	YES	YES
Compatible EBM type	NA	9EEBM72	9EEBM72	9EEBM72
Connections				
Input	IEC C14	IEC C14	IEC C20	IEC C20
Output	4 x IEC C13	6 x IEC C13	6 x IEC C13 + 1 x IEC C19	6 x IEC C13 + 1 x IEC C19

9E 1-3kVA Continued

Typical backup times at 50%/100% Load (minutes)				
9E	11/4.5	16/6.4	13.4/4.7	NA
9E + 1 EBM	NA	78/35	49/22	31/12
9E + 4 EBM	NA	243/119	173/83	152/73
Communication				
Communication ports	1 USB port + 1 RS232 serial port (USB and RS232 ports cannot be used simultaneously)			
Communication slot	1 slot for Network-M2, INDGW-M2 or Relay-MS cards			
Software	Intelligent Power Software			
Operating conditions, Standards and Approvals				
Operating temperature	0 to 40°C			
Noise level	37dB @ typical load	40dB @ typical load	40dB @ typical load	40dB @ typical load
Safety	IEC/EN 62040-1			
EMC, Performance	IEC/EN 62040-2			
Approvals	CE, CB report (TUV), RCM			
Dimensions D x H x W / Weight				
UPS Dimensions (mm)	356 x 228 x 144	399 x 330x 190	399 x 330x 190	399 x 330x 190
UPS Weight (kg)	9.5	22.4	24.2	7.9
EBM dimensions (mm) (for 2000/3000VA)	399 x 327 x 190			
EBM weight (kg)	35.8			

9E 6-20kVA

Technical Specifications	6kVA 1:1	10kVA 1:1 and 3:1	15kVA 1:1 and 3:1	20kVA 1:1 and 3:1
Rating (VA/W)	6kVA/4.8kW	10kVA/8kW	15kVA/12kW	20kVA/16kW
Format	Tower			
Electrical Characteristics				
Technology	Online double conversion			
Input voltage	220/230/240V			
Input voltage range without using batteries	176-276V without derating (up to 110-276V with derating)			
Output voltage/THDU	220V/230V/240V ±1 %, THDU<3%			
Input frequency range	45Hz-66Hz, 50/60Hz autoselection			
Efficiency	Up to 93% in Online mode, 97% in ECO mode			
Short circuit current	82A	137A	205A	273A
Overload capacity	105%-110%: 5min, 110%-130%: 1min, 130%-150%: 10s, >150%: 100ms			
Connections				
Input	Terminal block			
Outputs	Terminal block			
Typical backup times at 50% and 75% load				
9E	20/12	15/9	16/9	15/9
9E + 1 EBM	75/47	60/36	38/26	27/19
9E + 4 EBM	222/140	170/110	117/76	82/54
Communication				
Communication ports	1USB port + 1 RS232 serial port (USB and RS232 ports cannot be used simultaneously)			
Communication slot	1 slot for Network-M2, INDGW-M2 or Relay-MS cards			
Software	Intelligent Power Software			
Operating conditions, Standards and Approvals				
Operating temperature	0 to 40°C			
Noise level	<55dB			
Safety	IEC/EN 62040-1			
EMC, Performance	IEC/EN 62040-2			
Approvals	CE, CB report (TUV), RCM			
Dimensions D x H x W / Weight				
UPS Dimensions (mm)	612.9 x 708.5 x262.4	612.9 x 708.5 x262.4	706 x 815.5 x 350	706 x 815.5 x 350
UPS Weight (kg)	68	85.4	145.3	159.9
EBM dimensions (mm)	579.4 x 708.5 x 262.4	579.4 x 708.5 x 262.4	579.4 x 708.5 x 262.4	579.4 x 708.5 x 262.4
EBM weight (kg)	105.5	132	132	132
UPS with supercharger (and no batteries) dimensions (mm)	-	612.9 x 708.5 x 262.4	-	706 x 815.5 x 350
UPS with supercharger (and no batteries) weight (kg)	-	28.9	-	47.8

Eaton 9SX UPS

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



Combining reliable double-conversion topology, internal static bypass and an easy-to-read LCD menu display, the Eaton 9SX UPS provides the highly efficient and reliable power you expect from a 9-series UPS in a convenient tower form factor. Network, Modbus, relay and signal input functionality enables integration into a variety of IoT and IIoT applications.

Protect the business you've worked hard to grow:

Reliable power for critical systems

The 9SX offers the robust double-conversion, online power protection needed for medical, light industrial, automation and mission critical IT applications. With zero transfer time to battery, continuous filtering of power, and an internal, automatic static bypass, the 9SX ensures performance and compatibility.

Increased battery life

Eaton offers ABM technology that increases battery service life by 50 percent. ABM uses advanced charging techniques to extend battery life and provides advanced notice before batteries fail.

Get more so you can do more

More power

By providing up to 28 percent more wattage compared to traditional UPSs, the 9SX allows you to connect more devices and leave room for expanding IT systems.

More control

Automate power delivery by utilising switchable, programmable outlets, without the need of a third party device or PDU. Programmable signal input through the RPO port also enables the UPS to change operating modes in reaction to external events.

Gain efficiencies in your operations

Integrate and standardise communications

Maximise uptime with remote monitoring and management of your 9SX via an Eaton connectivity and software. SNMP, serial, USB, Modbus, and relay options enable integration regardless of the system architecture. Remote Power Off/Remote On Off signal input also manages UPS On/Off state preserving battery life during process shutdown.

Advanced LCD interface

Simplify UPS monitoring with Eaton's advanced LCD display. Easy access to UPS alarm history, energy logs, unit serial numbers and firmware versions enable first time issue resolution right at the source. Eight, user-selectable languages ensure success for global deployments.

Eaton 9SX UPS

Technical Specifications	700 VA	1000 VA	1500 VA	2000 VA	3000 VA	6000 VA
Rating (VA/W)	700VA/630W	1000VA/900W	1500VA/1350W	2000VA/1800W	3000VA/2700W	6000VA/5400W
Format	Tower					
Electrical characteristics						
Technology	ON-LINE double conversion with automatic bypass and Power factor correction system					
Nominal voltage	200/208/220/230/240V					
Input voltage range	190-276V without derating (up to 120-276V with derating)			200-276V without derating (up to 140-276V with derating)		180-276V without derating (up to 120-276V with derating)
Input frequency range	40-70Hz, 50/60Hz autoselection, frequency converter mode					
Connections						
Input	1 IEC C14 (10A)	1 IEC C14 (10A)	1 IEC C14 (10A)	1 IEC C14 (10A)	1 IEC C20 (16A)	Ph+N+E Terminal block
Output	4 AU (10A) sockets	4 AU (10A) sockets	4 AU (10A) sockets	5 AU (10A) sockets 1 IEC C19 (16A) socket	5 AU (13A) sockets 1 IEC C19 (16A) socket	Ph+N+E Terminal block
Switched outlet group	2 group programmable outlets					None for 6kVA
Batteries						
Typical backup times*	300W	500W	800W	1200W	1800W	2500W
9SX700I-AU	14	7.5				
9SX1000I-AU	24	14	7			
9SX1000I-AU + 1 EBM/+4 EBM	90/320	56/200	33/120			
9SX1500I-AU	39	23	12	7		
9SX1500I-AU + 1 EBM/+4 EBM	142/520	85/310	50/179	31/115		
9SX2000I-AU	62	36	22	13	7	
9SX2000I-AU + 1 EBM/+4 EBM	280/1050	165/620	100/390	65/250	40/160	
9SX3000I-AU	78	45	29	17	10	6
9SX3000I-AU + 1 EBM/+4 EBM	290/1100	175/630	108/421	68/255	45/168	30/112
	900W	1800W	2700W	3600W	4500W	5400W
9SX6KI-AU	66	28	18	11.5	8	6
9SX6KI-AU + 1 EBM/+4 EBM	250/1016	111/478	67/250	46/180	35/143	28/112
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 serial RS232 port + 1 mini-terminal block for Remote Power Off + mini-terminal block for Output relay					
Communication slot	1 slot for Network-M2, Network-MS, Modbus-MS or Relay-MS cards					
Operating conditions, standards and approvals						
Operating temperature	0 to 40°C					
Typical noise level	40dB	41dB	43dB	45dB	45dB	46dB
Safety	IEC/EN 62040-1					IEC/EN 62040-1
EMC	IEC/EN 62040-2 (Emissions, Category C1)					IEC/EN 62040-2 (Emissions, Category C2)
Approvals & markings	CE / CB report (TUV) / RCM					CE / CB report (TUV) / RCM
Dimensions H x W x D in mm / weight						
UPS	252x160x357/11.5kg	252x160x387/14.8kg	252x160x437/18.5kg	346x214x412/33.3kg	346x214x412/33.4kg	575x244x542/65.5kg
EBM		252x160x387/19kg	252x160x387/24.5kg	346x214x412/48.7kg	346x214x412/48.7kg	75x244x542/104.9kg
Customer service and support						
Warranty	2 years					

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

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 programmable 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 maximise 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: 86.5x440x605/27.4kg		
EBM	2U version: 86.5x440x605/39.2kg		
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	9PXEBM72RT2U
2m battery connection cable	EBMCBL72
Battery integration system	BINTSYS

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

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 programmable 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 efficiency level to reduce energy and cooling costs
- Double conversion topology. The Eaton 9PX constantly monitors power conditions and regulates voltage and frequency
- With a versatile rack/tower form factor, the 9PX is the most compact solution delivering up to 3000W in only 2U.

Availability and flexibility

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

Manageability

- The graphical LCD display provides clear information on the UPS's status and measurements on a single screen. Enhanced configuration capabilities are also available
- 9PX can meter energy consumption right down to the managed outlet groups. kWh values can be monitored using the LCD or Eaton's Intelligent Power® Software
- Load segment control enables prioritised shutdowns of non-essential equipment to maximise 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)			
Outputs	8 IEC C13 (10A) sockets		8 IEC C13 (10A) sockets + 2 IEC C19 (16A) sockets			
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-M2 card, INDGW-M2 or Relay-MS cards					
Operating conditions, standards and approvals						
Operating temperature	0 to 40°C					
Typical noise level	35dB		40dB			
Safety	IEC/EN 62040-1, UL 1778, CSA 22.2					
EMC	IEC/EN 62040-2, FCC Class B, CISPR22 Class B					
Approvals & markings	CE /CB report (TUV) / cULus / EAC /RCM / KC / Energy Star					
Dimensions H x W x D in mm / weight						
UPS	86.5x440x450/17.4kg	86.5x440x450/18.9kg	2U version: 86.5x440x605/25kg 3U version: 130x440x485/24.5kg	2U version: 86.5x440x605/27.6kg 3U version: 130x440x485/27.4kg		
EBM	86.5x440x450/29.8kg		2U version: 86.5x440x605/39.2kg 3U version: 130x440x485/38.2kg			
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.					

Eaton 9PX Lithium-ion UPS

1500VA-6000VA



9PX Lithium-ion UPS

Advanced protection for:

- Small and Medium Data Centre
- IT, Networking, Storage and Telecom
- Infrastructure, Industrial and Medical



Lithium-ion Online Double conversion UPS

Longer life

- 9PX lithium-ion UPSs feature an expanded battery life of 8–10 years compared to the usual 3-5 years with VRLA batteries.
- Lithium-ion batteries eliminate the need for battery replacement and attached costs (planning, labour, shipping).
- This longer life is backed by a five-year factory warranty including UPS electronics, internal batteries and EBMs.

Management and Cybersecurity

- Eaton Gigabit network management card provide Dual cybersecurity certifications (UL 2900-1 & IEC 62443-4-2).
- Eaton's Intelligent Power Software seamlessly integrates with leading virtualisation environments and cloud orchestrations tools.
- 9PX Lithium-ion 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 shutdowns of non-essential equipment to maximise battery runtime for critical devices.

High Performance

- Double conversion topology. The Eaton 9PX Lithium-ion constantly monitors power conditions and regulates voltage and frequency.
- Energy Star qualified, the 9PX Lithium-ion provides the highest efficiency level to reduce energy and cooling costs.
- Internal bypass allows service continuity in case of internal fault, a maintenance bypass is also available for easy replacement of the UPS.
- More runtime can be added with up to 4 external hot-swappable battery modules, able to run systems for hours if necessary.

Easy installation and upgrade

- Lighter weight: UPS weight reduced up to 20% and EBM weight reduced more than 40%.
- Smaller size: Battery extension size reduced to 1U saving space for IT equipment.
- Firmware upgrade can be done locally or remotely through the Gigabit Network management card.
- All models delivered with all necessary hardware for tower or rack-mounting.



Eaton 9PX Lithium-ion UPS technical specifications

- Graphical LCD display:
 - Clear information on UPS status and measurements
 - Enhanced configuration capabilities
- Slot for Management card (Network card delivered as standard on netpack version)



Eaton 9PX 3000VA

- Outputs: 8 x IEC 10A + 2 x IEC 16A with energy metering (including 2 programmable groups)
- USB port, 1 serial port, Remote ON/OFF, Remote power OFF and Relay output
- External battery (EBM) connector

Technical Specifications	1500		2000		3000		6000	
Rating (VA/W)	1500VA/1500W		2000VA/2000W		3000VA/3000W		6000VA/5400W	
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 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)		up to 94% in online mode (up to 98% in Hi-efficiency mode)	
Connections								
Input	1 IEC C14 (10A)		1 IEC C20 (16A)				Terminal block	
Outputs	8 IEC C13 (10A) sockets		8 IEC C13 (10A) sockets + 2 IEC C19 (16A) sockets				Terminal block + 8 IEC C13 (10A) sockets + 2 IEC C19 (16A) sockets	
Switched outlet group	2 outlet groups							
Batteries								
Typical backup times*	300W	500W	800W	1200W	1800W	2400W	3500W	4800W
9PX 1500	45	30	20	13				
9PX 1500 + 1 EBM/4EBM	114/321	76/210	52/145	33/92				
9PX 2000	66	45	30	21	14			
9PX 2000 + 1 EBM/4EBM	170/475	112/305	78/205	52/148	35/98			
9PX 3000	68	46	30	21	14	10.5		
9PX 3000 + 1 EBM/4EBM	184/516	120/320	80/215	54/153	37/104	28/78		
9PX 6000	110	72	45	32	22	17.5	12	8.5
9PX 6000 + 1 EBM/4EBM	400/1200	240/720	160/470	110/340	80/230	60/175	41/122	30/89
Battery	Lithium-ion battery (LFP) with 8 to 10 years service life, automatic recognition of external battery modules (EBM)							
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 DB9 for dry contacts (6kVA)							
Communication slot	1 slot for Gigabit Network management card (included in netpack versions), Industrial Gateway Card (Modbus TCP/RTU) or Relay card							
Operating conditions, standards and approvals								
Operating temperature	0 to 40°C							
Typical noise level	35dB		40dB				45dB	
Safety	IEC/EN 62040-1, UL 1778, CSA 22.2							
EMC	IEC/EN 62040-2, FCC Class B (Class A for 6kVA), CISPR22 Class B (Class A for 6kVA)							
Approvals & markings	CE /CB report (TUV) / EAC/ Energy Star							
Dimensions H x W x D in mm/ weight								
	1.5kVA		2kVA		3kVA		6kVA	
UPS	86.5x440x450/15.8kg		86.5x440x605/22.1kg		86.5x440x605/22.8kg		130x440x685/36.9kg	
EBM	42.9x438x448/12kg		42.9x438x603/17.4kg		42.9x438x603/17.4kg		438x85.3x645/35.8kg	
Customer service and support								
Warranty	5 years full warranty (eletronics, internal batteries and EBM)							

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

Parts numbers*	1.5kVA	2kVA	3kVA	6kVA
UPS RT	9PX1500IRTANZ-L	9PX2000IRT2U-L	9PX3000IRTANZ-L	
UPS RT with Gigabit Network card				9PX6KIRTN-L
EBM RT	9PXEBM48RT1U-L	9PXEBM72RT1U-L	9PXEBM72RT1U-L	9PXEBM192RT2U-L

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

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/Output 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 virtualisation 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
- 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 hot-swappable 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 mini-terminal block for remote On/Off and 1 for remote power Off, 1 DB15 for parallel operation			
Communication slot	1 slot for Network-M2 card, INDGW-M2 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, RCM			
Dimensions H x W x D / weight				
UPS	440(19'')x130(3U)x685mm/48kg	440(19'')x130(3U)x685mm/48kg	440(19'')x260(6U)x700mm/84kg	440(19'')x260(6U)x700mm/86kg
EBM	440(19'')x130(3U)x645mm/68kg	440(19'')x130(3U)x645mm/68kg	440(19'')x130(3U)x680mm/65kg	440(19'')x130(3U)x680mm/65kg
Power module	-	-	440(19'')x130(3U)x700mm/19kg	440(19'')x130(3U)x700mm/21kg
Customer service and support				
Warranty	3 years			

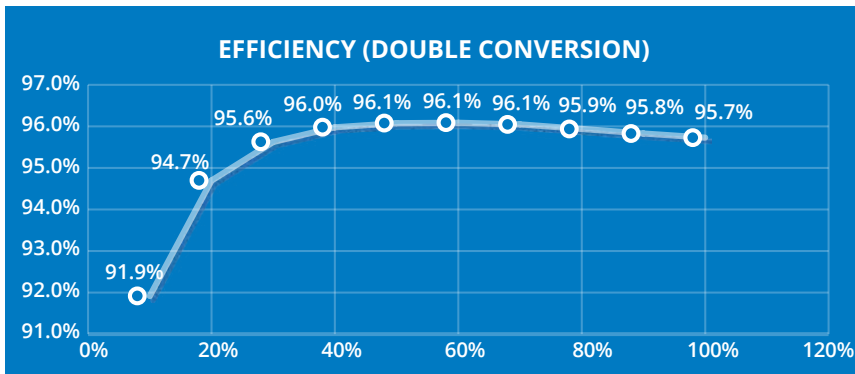
* Runtimes are shown at 0.7 power factor. Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc

Eaton 9SX 15kVA/20kVA UPS



High Efficiency

Double conversion efficiency up to 96%.



9SX reduces energy usage & CO2 emissions to help IT Managers save costs on power and cooling.

High Power Density

- The 15kVA/20kVA power model is only 3U rack space
- Short depth chassis suitable to be deployed in cabinets as shallow as 800mm deep
- 438mm width for standard 19" rack mounting.

High Power Factor

Unity power factor VA=Watt

Powers more servers than similar UPSs with equivalent VA ratings with lower power factors.

Versatile Installation

Can be easily deployed as a rack mount or free standing (tower) unit.

Parallel Operation

For redundancy and expanded power rating.

Large Coloured Touch Screen LCD

Built-in gravity sensor that automatically rotates the screen based on UPS deployment orientation.

ESS Mode

Achieve up to 98.8% efficiency in ESS mode. System switches to online mode on demand in less than 2ms response time.

Battery Management

Eaton's exclusive ABM® technology increases battery service life by 50%. ABM uses an advanced, three-stage charging technique and closely monitors battery health to provide advanced notice when batteries need replacement.

Variable charging current ranges from 0-13A, suitable for recharging larger battery banks.

Endure Harsh Environments

- Operation temperature up to 50°C
- Maximum operation altitude up to 4000m
- Line mode overload capacity up to 10min at 125% rated load.

Professional HMI for Operation, Configuration and Setting

Multi connectivity port – RS232, USB, dry in/out, EPO, intelligent slot.

EBM

- Connect up to 6 sets (2x6 modules) of EBMs for extended runtime.
- Minimum deployment is 1 set (2 modules) per UPS.
- Each increment must be a complete set.

Eaton 9SX 15kVA/20kVA UPS

UPS Power Module	9SX15KPM	9SX20KPM
Input		
Rated input voltage	1 phase 220/230/240V; 3 phase 380/400/415V	
Input voltage range	160V~300V full load; 100~160V linear derating	
Rated input frequency	50Hz/60Hz	
Input frequency range	40 Hz~ 70 Hz	
Input frequency phase lock range	50Hz system:45 Hz~ 55 Hz; 60Hz system:54 Hz ~ 66 Hz	
System compatibility	TN-S / IT	
Input power factor (PF)	>0.995 both 1 phase and 3 phases	
THDi	3% linear load; 5% non-linear load	
Output		
Input-output phase connection	Input-output 3-1, 3-3, 1-1	
Rated output voltage	1 phase 220/230/240V; 3 phase 380/400/415V	
Rated output frequency	50Hz/60Hz	
Rated output appearance power	15kVA	20kVA
Rated output active power	15kW	20kW
Max PF	1	
Voltage variation	±1%	
THDV	1% linear load; 3% non-linear load	
Load crest ratio	3:1	
Output connection	Terminal block	
Overload capacity line mode (at rated voltage)	105%<Load 125%: 10min 125%<Load 150%: 1min >150%: 0.5s	
Battery and charger		
Internal batteries	None. 2 x modules (1 set) as minimum to provide backup time.	
Max. quantity	6 sets (2x6 modules)	
Battery voltage	±240V (adjustable to ± 192V, use with correct battery)	
Charging current	0~13A adjust	
Recharging time	3 hours to 90% (1 set of EBMs)	
Efficiency		
Online mode	up to 96%	
ECO or ESS mode	up to 98.8%	
Other working mode		
CVCF (constant voltage and constant frequency)	No derating at 3-3, 3-1 mode; Derating to 60% at 1-1 mode	
Parallel mode	maximum 3	
Interface		
Display	Coloured touch LCD with gravity sensor	
Connectivity port	RS232 DB9; USB 2.0 type-B; programmable dry contacts in/out; 1 x Mini-slot for comms cards	
Physical dimension		
Dimension (HxWxD)	129mmx438mmx589mm	
Net weight (Kg)	23.7	
Environment		
Operation temperature	0°C ~ 50°C (0~40 no derating 40°C~ 50°C derating to 50%)	
Storage temperature	-25°C~60°C	
Relative humidity	0 ~ 95%	
Operating altitude	0~4000m (0~1000m no derating, 1000m~4000m the load derating 1% every up 100m)	
Noise level	55dB	
Warranty	2 years	
Certification		
Safety	CE/TLC/RCM	
Energy saving	CQC	
EBM		
Dimension (HxWxD)	129x438x589 mm per module (multiply height by 2 for dimension of complete set)	
Net weight (Kg)	62.1 per module (multiply by 2 for weight of a complete set)	
MBP (maintenance bypass)		
Dimension (HxWxD)	129mmx438x489mm	
Net weight (Kg)	21.5	





Three Phase UPS

Critical protection for:
Hyperscale, Multi-tenanted and
Colocation Data Centres, Mining,
Infrastructure, and Institutions

Eaton 93PS & 91PS



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 & 91PS 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 & 91PS 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 & 91PS helps to minimise operational expenditure costs, in addition to addressing the cost pressures resulting from commoditisation of IT services. Increased efficiency also leads to higher sustainability, through reduced carbon emissions.

Scalability

Scalability helps to optimise capital expenditure on 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 & 91PS takes resiliency to the next level by providing high fault clearing capabilities.

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 & 91PS design simplifies and facilitates the compliance with local regulation and easy 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

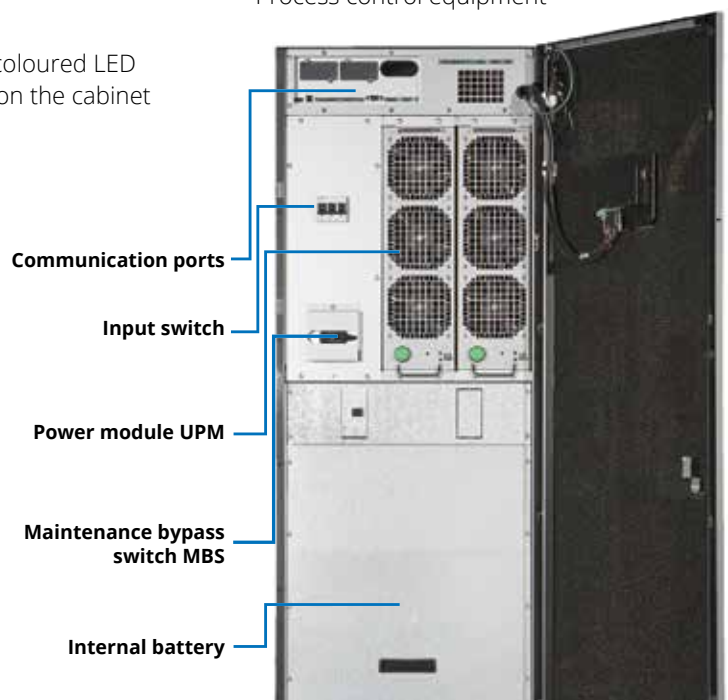


Eaton 93PS user display

For user safety and convenience, the 93PS displays a range of coloured 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 < 47 dBA in ESS					
Maximum service altitude	1000 m (3300 ft) above sea level at 40°C Maximum 2000 m (6600 ft) with 1% derating per each add. 100 m					
Internal 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						
Mini-slot	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 <https://www.eaton.com/content/dam/eaton/products/backup-power-ups-surge-it-power-distribution/au-products/eaton-warranty-statement-au-en-gb.pdf>

Eaton 93T

A cost-effective, reliable and flexible three-phase monolithic transformer-free UPS solution



Product values

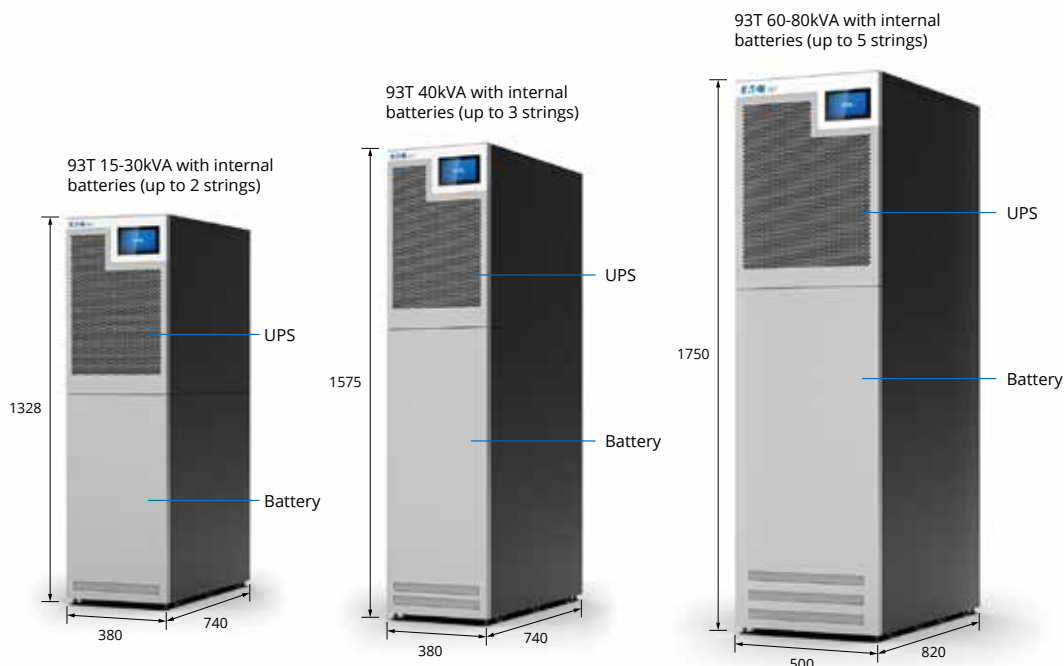
- Provides a reliable, easy-to-maintain power protection system for small and medium applications
- Frees customers from restrictions of expense, space and lacking professional maintenance personnel/technology experts by providing low TCO (total cost of ownership) and superior performance
- Provides integrated continuous power protection solution with internal battery autonomy in compact footprint.

Typical applications

- Network centres of government facilities and educational institutions
- Information & Technology centres of small and medium enterprises
- Data centres of financial institutions such as banks and securities companies.

Product features

- The high-availability and easy-to-maintain transformer-free UPS creates a reliable power protection system for IT installations and mission critical applications
- The cost-effective and high-efficient power supply solution optimises customer initial investment cost and whole-lifecycle operating costs
- Back feed protection to prevent feedbacks from the inverter to the mains in case of mains failure and a fault in the bypass circuit, to provide safer operating condition for end users and service engineers
- Flexibly adapt to business development and energy storage system upgrades
- Integrated autonomy. Able to house up to 5 strings of battery, to provide 5 minutes battery autonomy at full load condition, without additional battery cabinet installation
- Lithium-ion battery compatible UPS solution
- 5-inch colourful touchable screen allows control and monitoring of system status and performance. 93T also provides users with various communication interfaces and options.



Eaton 93T 15-80kVA UPS

Capacity	Rated capacity/active power (kVA/kW)	15/15	20/20	30/30	40/40	60/60	80/80
Input	Rated input voltage (Vac)	380/400/415					
	Input voltage range (Vac)	201-478					
	Rated input frequency (Hz)	50/60					
	Input frequency range (Hz)	40-72					
	Bypass voltage range (Vac)	+/- 15% by default, +/- 20% optional					
	Input power factor	> 0.99					
	Input current THDi (@ rated linear load)	< 3%					
	Icc rating (kA)	35					
Output	Rated output voltage (M)	380/400/415					
	Rated output frequency (Hz)	50/60					
	Power factor	1					
	Output voltage regulation (steady state)	±1%					
	Output voltage tolerance regulation (dynamic)	±5% (0-100% load variation)					
	Output voltage THDv (@ full linear load)	< 2%					
	Inverter overload capacity	10 minutes, @125%					
	Productivity	Double-conversion mode	> 96%				
ESS mode		99%					
Parallel	Parallel unit	Up to 4					
Battery configuration	Battery type	VRLA, NiCad, Lithium-ion					
	Battery blocks quantity (with internal VRLA batteries)	36	36	36	36	40	40
	Charging method	BMS, ABM, or constant float charge					
	Connection	Support common battery					
	WxDxH (mm)	380x740x1328			380x740x1575	500x820x1750	
	Net weight (kg) without batteries	79		81		128	
	Net weight (kg) with batteries	230	288	313	424	660	768
Communication	Communication interface	2 mini-slots, 3 building alarms inputs, and 1 RS232&1 USB					
	Communication accessories	Gigabit network card; Industrial gateway card; EMP temperature and humidity sensor; AS/400 relay/RS-232 interface card					
Others	Temperature	0-50°C*					
	Humidity	5-95%, non-condensing					
	Altitude	< 1000 m, no derating					
	Noise (1m)	65dB					
	Safety	IEC62040-1					
	EMC compatibility	IEC62040-2					
	Performance	IEC62040-3					
	Certification	TLC, CQC energy saving, and Seismic test report					

*Conditions apply

Eaton 93PR



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

Available in 75kW & 200kW frame sizes, the modular design of the 93PR enables it to suit a wide range of requirements. And, whichever one you choose, you can be sure it will provide the lowest Total Cost of Ownership combined with maximum availability, for cost-efficient business continuity. Ensuring that you can always access the power your mission critical application requires – under all circumstances – without compromising business performance or safety, the 93PR is the most efficient, scalable, Cloud-ready and safe UPS you can choose.

Efficiency

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

Scalability

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

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.

Modular batteries

Eaton 93PR 75kVA model comes with modular internal batteries which can be easily replaceable on site. Modular battery provides the advantage of sensationalising the battery string voltage to a much safer voltage.

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
9016-9295	Eaton 93PR 75kW Frame, internal back-feed, internal battery	75kW max	603 x 1013 x 2050	468

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

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 or 75kW
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 40 blocks. Default is 40 blocks
Charge current limit	Default 5A, configurable maximum 25A per UPM
Battery start capability	Yes

Communications

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

Accessories

Compliance with standards

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

For information on product warranty, please visit <https://www.eaton.com/content/dam/eaton/products/backup-power-ups-surge-it-power-distribution/au-products/eaton-warranty-statement-au-en-gb.pdf>

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 derating
- Intelligent battery charging through Advanced Battery Management prevents unnecessary charging and significantly retards battery wear rate.

Applications

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

10% more power

- Complete isolation of output power from all input power anomalies, to deliver 100% conditioned, perfect sinewave 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 the 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 derating. 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.



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 HotSync 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

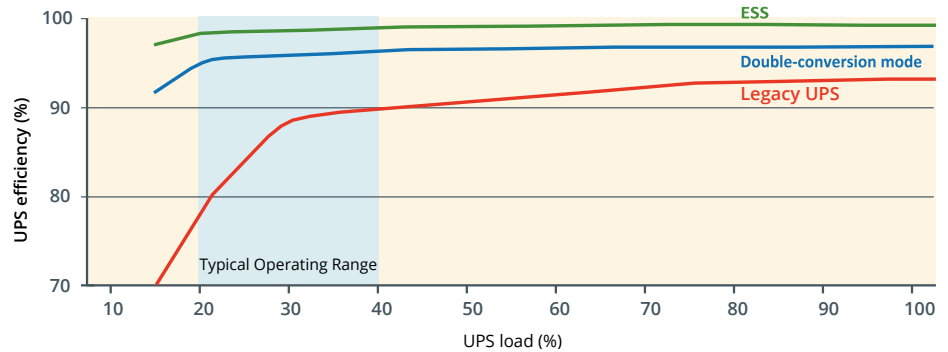
For information on product warranty, please visit <https://www.eaton.com/content/dam/eaton/products/backup-power-ups-surge-it-power-distribution/au-products/eaton-warranty-statement-au-en-gb.pdf>

Eaton 93PR 300-1200kW UPS



Features and Benefits

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



- Up to 50% footprint saving
- Flexible ventilation options
- On-line replaceable UPM & STSW & Communication module, MTTR as low as 5 mins
- Robust components using oil-filled capacitors & IGBT modules
- Perfect integration with Lithium battery, compatible with multiple Lithium-ion BMS
- High efficiency UPM module, efficiency up to 97%
- Complete power isolation options (Input/ Output/ Bypass/ MBS)



Enhanced efficiency and reliability with SIC Hybrid IGBT Module



Long life oil-filled capacitor

Easy management

Provides easier access to detailed status information through its large, userfriendly 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.

Connectivity options:

- Power Xpert Gateway Mini-slot UPS Card
- Industrial Relay Card - MS
- Industrial Gateway Card
- Gigabit Network Card (Network-M2)
- SNMP



Connectivity Cards



LED light bars

Red light bars showing alerts on system. Yellow light bars indicate battery and bypass status.

Eaton 93PR 300-1200kW UPS

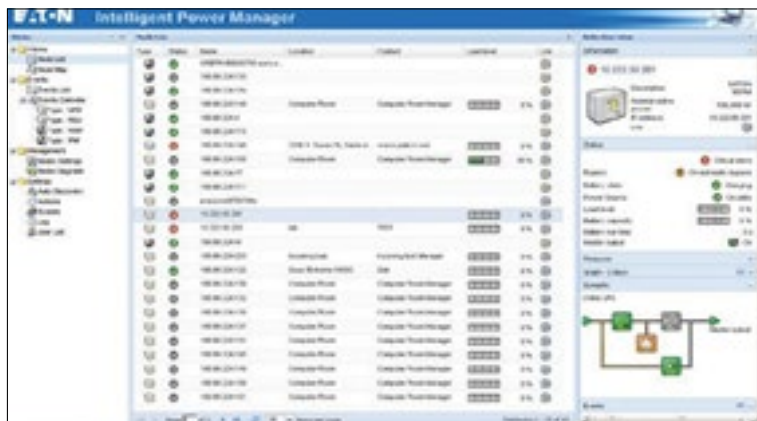
Easy management

Integrates with the leading virtual platforms through its full suite of power management and connectivity software

Designed for the most advanced IT environments, the 93PR supports optional communication cards that allow remote access via the HTTP(S), SNMP, Modbus TCP/IP, Modbus RTU and BACnet IP protocols. In addition, Eaton's Power Xpert® software and Intelligent Power® Software Suite give you all the tools you need to manage power devices in your physical or virtual environment.

Learn more at Eaton.com/intelligentpower.

Intelligent Power Manager® (IPM) is a world class power management software platform. It seamlessly monitors power and environmental conditions while providing business continuity for workloads using VMware®, Citrix® and Microsoft® platforms. IPM also optimises power and environmental conditions for data centres using OpenStack® or HPE OneView®.



Lithium-ion battery

Power on demand

Eaton's lithium-ion battery systems provide a reliable and flexible solution that ensures 24/7 system uptime while delivering significant total-cost-of-ownership (TCO) savings. Capable of providing mega-watts of power in a small footprint, this battery solution comprises of lightweight battery strings designed to seamlessly connect to a Power Xpert™ 9395 or 93PR UPS.

Why lithium?

Lithium-ion chemistry demonstrates superior characteristics in UPS applications, this results in high energy density, long life, flexible installation, improved cycle life and a lower TCO.

Backup battery runtimes

Contact Eaton for backup times and configurations. A wide range of runtimes from 3 minutes to an hour + are available.

Management and monitoring system

The lithium-ion battery integrates a powerful battery management system (BMS), providing cell protection (temp, current, over/under voltage), cell balancing, state of charge and health and alarms/ reports.

Protection: The BMS processes critical parameters such as voltage levels, temperature, and current at the module and solution levels. Abnormal conditions (warnings and alarms) are quickly detected and, if necessary, the BMS will protect the system from damage by disconnecting the affected battery.


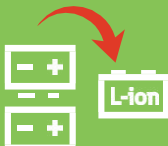

Performance optimisation: The BMS incorporates cell and module balancing controls. This function optimises the voltages of each module to maximise performance and increase service life.

EnergyAware upgrade

With Eaton's EnergyAware kits upgrade, UPS with lithium battery can do much more beyond UPS.

To find out more about EnergyAware, visit Eaton.com/EnergyAware

Benefits of lithium-ion

Save money	10 year performance warranty 15 year design life	
Save space	up to 8x cycle 40% smaller 60% lighter	
Reduce risk	24/7 BMS monitoring	

For more information on Lithium-ion battery, visit Eaton.com/Lithium

Demand charge management

User avoids demand charges by discharging at peak times.

Time-of-use optimisation

Shifts energy consumption to avoid peak energy usage.

Demand response

Utility company requests reduction in power usage.

Frequency regulation

Charge or discharge battery on command to stabilise the grid.

Aggregation services

Manage multiple assets in a building or campus to work as a single entity.

Eaton 93PR 500-600 kW UPS

Technical Specifications	300kVA	600kVA	1200kVA
Power modules			
Power offering (kW)	300kVA	600kVA	1200kVA
General characteristics			
Efficiency in Energy Saver System (ESS)	Up to 99%		
Efficiency in double-conversion mode	Up to 97.5%		
Parallel capability	Maximum 8 units external parallel		
Cold start	Supported		
Softstart	Rectifier ramp up, compatible with generator, ramp up rate configurable		
Input characteristics			
Voltage	380/400/415V		
Voltage range:	301~478V L-L		
	175~276V L-N		
Frequency range	50/60 Hz		
Power factor	> 0.99		
Input current distortion	< 3% @ 100% load capacity		
Battery			
Battery type	Lithium, VRLA, Ni-Cad		
Charging method	BMS, ABM or constant float charge		
Battery voltage	360V - 700VDC		
Battery connection	Support common battery		
Output			
Voltage	380/400/415V 4 wire		
Frequency range	50/60 Hz		
Regulation	±1% steady state		
Voltage THD	< 1% (100% linear load) < 5% (non-linear load)		
Overload	125% 10 mins		
Certification			
Safety	IEC62040-1		
EMC	IEC62040-2		
Performance	IEC62040-3		
Certificate	CE		
Optional accessories			
• SNMP Card • PXGMSUPS Card	• X-Slot Modbus RTU Card • External Sync Control Box	• INDRELAY-MS Card • Lithium battery cabinet	• Network-M2 • Top exhaust kits • INDGW-M2
UPS dimensions (mm)			
Height	2000	2069	2069
Depth	1100	1100	1100
Width	600	1200	1200
UPM dimensions (mm)			
Height	173.4 (4U)		
Depth	700		
Width	439		
Weight (kg)			
UPS (w/o UPM)	375	766	1528
UPM	39		

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

The background image shows a large industrial port at night. Several large cargo ships are docked at the pier, illuminated by bright yellow lights. Cranes and other industrial structures are visible on the ships and along the pier. The sky is dark blue, and the water in the foreground is calm. A semi-transparent orange rectangle is overlaid on the upper part of the image, containing the title text.

Industrial and Marine UPS

1-3kVA Range 1P Industrial and Marine UPS



Industrial grade UPS

Industrial grade UPS are designed to protect mission critical equipment where a clean and controlled environment for the UPS is not always available. These environments include but not limited to, mining, rail, utilities plants, and medical facilities. High quality silicon-based coating on PCB boards are done at the manufacturing level to reduce chances of defects and handling errors. Conformally coated boards provides the UPS properties such as dust-proof, hydrophobic, and resistance to oxidation, thermal, as well as moisture. All units go through vigorous tests that includes vibration test (to IEC 60068-2-6 Class A). Industrial units also have a high ambient temperature tolerance (40°C-55°C with derating to 60% nominal load).



Marine grade UPS

Eaton's marine UPS are specially engineered for shipping environments and applications, built to meet and exceed industry standards. These units are designed to protect critical onboard functions and processes, such as navigation, communication, bridge equipment, lighting, and automation. Marine UPS come as a kit, and includes: Industrial grade UPS, Marine Filter, and an installation bolt down kit (for tower mount UPS only). When deployed as a complete kit, your system will be DNV-GL Type Approved.

1-3kVA Range 1P Industrial and Marine UPS

	Rack Mount (9PX)		Tower (9SX)	
	1500VA	3000VA	1000VA	3000VA
Rating (VA/W)	1500VA/1500W	3000VA/3000W	1000VA/900W	3000VA/2700W
Format	RT2U	RT3U	Tower	
Electrical characteristics				
Technology	Online double conversion with Power Factor Correction (PFC) system)			
Nominal voltage	200/208/220/230/240V			
Input voltage range	176-276V without derating (100-276V with derating)		190-276V without derating (120-276V with derating)	200-276V without derating (140-276V with derating)
Input frequency range	40-70Hz, 50/60Hz auto selection, frequency converter mode			
Efficiency (online)	up to 92.5%	up to 94%	up to 90%	up to 91%
Efficiency (high efficiency mode)	up to 97.5%	up to 98%	up to 95%	up to 96%
Connections				
Input	1 IEC C14 (10A)	1 IEC C20 (16A)	1 IEC C14 (10A)	1 IEC C20 (16A)
Outputs	8 IEC C13 (10A) sockets	8 IEC C13 (10A) sockets + 2 IEC C19 (16A) sockets	6 IEC C13 (10A) sockets	8 IEC C13 (10A) sockets + 1 IEC C19 (16A) sockets
Communication				
Communication ports	1 x USB + 1 x serial RS232 port + 1 mini-terminal block for remote On/Off + 1 x mini-terminal block for remote power off + 1 x mini-terminal block for output relay			
Communication slot	1 x slot for NETWORK-M2/INDGW-M2/RELAY-MS cards			
Operating conditions, standards, and approvals				
Operating temperature	0°C to 40°C			
Typical noise level	35dB	40dB	41dB	45dB
Safety	IEC/EN 62040-1, UL 1778 (Marine), CSA 22.2 (Marine)			
EMC	IEC/EN 62040-2, FCC Class B (Marine), CISPR22 Class B (Marine)			
Approvals & markings	DNV-GL Type approved (Marine) / CE / CB report (TUV) / cULus / EAC / RCM / KC (9PX) / Energy Star (9PX)			
Dimensions H x W x D in mm / weight				
UPS	86.5x440x450/18.9kg	130x440x485/27.4kg	252x160x387/15kg	346x214x412/34kg
EBM	86.5x440x450/29.8kg	130x440x485/38.2kg	252x160x387/19kg	346x214x412/48.7kg
Customer service and support				
Warranty	3 years		2 years	
Part numbers				
Industrial units (conformal coated)	9PX1500IRTCC	9PX3000IRTCC	9SX1000ITCC	9SX3000ITCC
Marine bundle (inc. filter & inst. kit (for tower)	9PX1500IRTMR	9PX3000IRTMR	9SX1000ITMR	9SX3000ITMR
Marine UPS only	9PX1500IRTM	9PX3000IRTM	9SX1000IM	9SX3000IM
Marine filter	9PXM3FI	9SXM3FI		
Marine installation kit	N/A	N/A	9SXIK1KI	9SXIK3KI
Other accessories	Communication cards, EBMs, and additional rail kits share the same part number as the respective 9PX/9SX standard models			

Eaton 9PHD Marine UPS



Easy deployment for optimising 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 minimising 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 maximising 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

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		
Mini-slot	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

Eaton 93PS Marine UPS 8-40 kW



Key applications:

- Navigation
- Communication
- Automation and monitoring systems
- Auxiliary power systems
- Safety systems
- Distributed UPS systems
- Peak shaving
- EPOS

Ease of deployment

- Spacious power cabling area at the bottom of the unit
- Factory installed and tested internal transformers reduce footprint and cabling at site by 50%
- Best in class footprint and power density for easier floor planning and space saving
- Possibility to design inherently redundant systems in one frame
- Back feed protection and bypass fuses included by default for easier planning and secured safety
- Ships with any classification society certificate as requested
- Engineering package to help planning in 3D or 2D environment
- Pre- and after-sales support assisting you from quoting to decommissioning.

Ease of maintenance

- HotSwap power modules means typical MTTR=0h
- Training + pre-defined spare part kits for basic UPS service
- Fully front serviceable
- Mini-slot extension cards for remote monitoring and management
- No replacement of DC caps during the product design life
- Easy Capacity Test to do full load test without the need for load bank
- Eaton Advanced Battery Management (ABM) maximises the battery life while providing automatic diagnostics of battery health
- Worldwide coverage of Eaton service at your service 24/7.

Economical to operate

- Minimal losses and associated costs due to market leading efficiency reaching above 96%
- Cuts down operational costs by up to 50% compared to a legacy UPS
- Saves up to 650 barrels of marine diesel per UPS
- Flat efficiency curve means high efficiency regardless of the load level
- Compatibility with VRLA, Ni-Cd, Li-Ion or super capacitors allows for choosing the optimal energy or power reserve for your application.

Eaton 93PS Marine UPS 8-40 kW

Technical Specifications	
General	
Output power rating	(PF 1.0) 8, 10, 15, 20, 30, 40 kW
External paralleling	Up to 4 units with HotSync technology
Inherent redundancy	Up to 20 kW with HotSync technology
Efficiency in double-conversion mode	Up to 96.0%
Efficiency in Energy Saver System mode	Up to 98.8%
UPS topology	Double conversion
UPS performance classification	VFI-SS-111
Degree of ingress protection	IP23
Standard UPS colour	Industrial grey; RAL 7035
Ambient service temperature range	0°C to 45°C
Maximum service altitude	1000 m (3300 ft) above sea level at 40°C
Acoustic noise at 1m, in 25°C ambient temperature, without transformers	< 60 dBA in double conversion < 47 dBA in ESS
Mean Time To Repair (MTTR)	< 8 minutes (UPM) / < 15 minutes (UPS)
RoHS/WEEE compliancy	Yes
Input	
Nominal voltage rating	380 V, 400 V, 415 V
Input voltage with internal transformers	208 V - 690 V
Input frequency range	40 - 72 Hz
Input wiring	3ph+N+PE (3ph+PE with input transformer)
Input power factor	0.99
Input THDi 100% linear load	< 3%
Soft start for generators	Yes
Internal back feed protection	Yes, for rectifier and bypass lines
Output	
Output wiring	3ph+N+PE / 3ph+PE
Rated output voltage	380 V, 400 V, 415 V
Output voltage with internal transformers	208 V - 690 V
Output frequency	50 Hz / 60Hz configurable
Output UTHD	< 1.5% (100% linear load), < 3.5% (100% non-linear load)
Inverter overload capacity	10 min 102 – 110% load 60 s 111 – 125% load 10 s 126 – 150% load 300 ms > 150% load
Static bypass capacity	Continuous < 125% load, 20 ms 1000% load
Short-circuit capability at rated voltage	Up to 144 A / 300 ms
Rated output power factor	1.0
Load power factor range	0.8 lagging to 0.8 leading

Technical Specifications	
Battery	
Battery technology	VRLA, Li-Ion, NiCd, Eaton Super Capacitors
Nominal battery voltage	336 V - 480 V
Charge current limit	
Load ≤80%	Up to 50 A, configurable
Load >80%	Up to 30 A, configurable
Charging method	Eaton ABM technology or float
Boost charge function	Yes
Temperature compensation	Yes
Battery start option	Yes
Communications	
Mini-slots	2 communication bays for Web/SNMP, Modbus/Jbus & Industrial realy
Standard connectivity ports	Device USB and Host USB, RS-232 service port, relay output, 5 building alarm inputs, 1 relay output and a dedicated EPO
Accessories	
Accessories for UPS	Internal transformers; Single feed kit; Earth fault monitoring; 24V Emergency Power Off (EPO); Custom system and battery voltages; Custom ds
Compliance with standards	
Safety (CB certified)	IEC 62040-1
EMC	IEC 62040-2
Performance	IEC 62040-3
RoHS	EU directive 2011/65/EU
WEEE	EU directive 2012/19/EU
Environmental aspects - requirements and reporting	IEC 62040-4, EN 50581

Due to continuous product improvement programmes, specifications are subject to change without notice. For product specific specifications, contact Eaton sales representatives.





ePDU, PDU and Maintenance Bypass, Enclosures

Intelligent Power® Distribution 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, C39 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.

Metered Input ePDU

Metered Input 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, SNMP, 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 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, SNMP, 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, SNMP, 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



Rack PDU G4 rewrites the rules

When you talked about connectivity, we listened.

Boost efficiency, security, density and flexibility to meet today's data centre priorities Eaton's new rack PDU G4 - 4th generation delivers highly secured power distribution and business continuity, critical in today's data centre space. This has been achieved by in-depth work, incorporating customer experience and marketplace feedback.

Business Continuity and Security

- Enhance the reliability of power connections, **prevent accidental disconnections**.
- Ensure **uninterrupted power supply and network availability** for essential business operations.
- Keep your data flowing without any interruptions. The Rack PDU G4 is designed to provide the **highest level of cybersecurity**.

Sustainable and Smart

- From conception to end-use, G4 PDU has been **designed to reduce energy consumption** whilst **optimising and monitoring power usage** accurately.
- Plan better for extended power failure events and monitor the installation in greater depth with **Environmental data extraction**.
- **Maximise compatibility** by controlling your PDU thanks to the multiple secure communication protocols.

Better User Experience



C39 outlet combines both C13 10A and C19 16A specifications. This offers unprecedented flexibility and ease of use. The only question now is: "how many outlets do I need?" Not "which kind?"

- Meet specific infrastructure needs and **maximise available rack space** with a wide range of high outlet density PDU.
- Boost uptime and **improve service capability** with the HotSwap network module.
- LCD screen provides an improved user experience **for easier installation/commissioning**.
- **Save time on deployment** and save costs by swapping out equipment without the inconvenience of re-ordering a new rack PDU.

Designed for incremental feature upgrades

According to the latest market trends, the new G4 PDU range provides up to 48 outlets per PDU in a low-profile chassis. Eaton offers extensive PDU configurations including 1-Phase, 3-Phases, and 16A, 32A, 63A to meet specific infrastructure needs.



Basic

Basic G4 PDUs **provide cost-effective, reliable power distribution** with a secure, built-in high retention system to firmly hold standard power cords and a new type C39 outlet that combines C13 and C19 connectors.

Switched

Advanced **control features** at outlet level combined with all power quality measurement capabilities of the Metered Input PDU.

Metered Input

Metered input G4 PDUs streamline power management and promotes efficient operations by **simplifying load balancing and preventing overloads**.

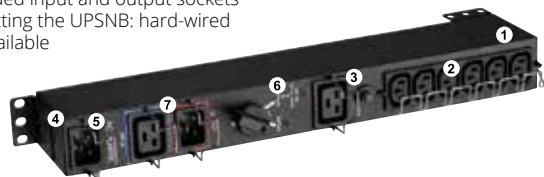
Managed

Managed G4 PDUs incorporate all the features of the switched model and goes a step further by actively **monitoring and measuring** crucial power quality factors such as voltage, current and power consumption at the outlet level.

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 C13 + 1 IEC C19 Or 6 AU 10A GPO + 1 IEC C19	6 IEC C13 + 1 IEC C19 Or 3 AU 10A GPO + 1 IEC C19	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 (0.5-10mm ²)	Terminal Block (4-25mm ²)
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			

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 minimises installation time and reduces costs while serving as the foundation of a complete data centre infrastructure solution.

As more companies shift mission-critical IT systems to virtualised infrastructures, data centre 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 Centres.

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 widerange 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 Minimise data centre 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).

Technical Specifications				
Product	Application	Dimension	Configuration	Colour
Server				Black
Server enclosure	Server (1500kg)	H (RMU) = 42 W (mm) = 600 D (mm) = 1070	Frame, rails (flush), locking sides, casters, top, full front door with swing handle, split rear doors with swing handle; PDU brackets	Black
	Server (1500kg) – No sides	H (RMU) = 42 W (mm) = 600 D (mm) = 1070	Frame, rails (flush), casters, top, full front door with swing handle, split rear doors with swing handle; PDU brackets	Black
Colocation				
Colocation enclosure	Colocation (1500kg)	H (RMU) = 42 W (mm) = 600 D (mm) = 1070	Frame, rails, locking sides, casters, top, full front door with combo lock, split rear door with combo lock, PDU brackets	
Key Accessories				
Air dams	800mm W enclosures	H = 42	Air dam with blanking panels and grommets	Black
PDU brackets	All enclosures	H = 24, 42	Additional PDU brackets for mounting on second side or for half height rack PDUs	Black
Vert. cable mgr	800mmW enclosures	H = 42	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	Fixed, Telescopic	Black
Fan tray	Network enclosures	D = 600mm, 1000mm, 1100mm	4-6 Fans per kit	Black
Bottom plate	Server enclosures	W = 600mm, D = 1100mm, 1200mm	Steel, fully contained	Black
Blanking panel	All enclosures	1U, 2U, 3U, 4U	Tool-less metal, tool-less plastic	Black





DC Solutions and Cabinets



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 and lithium batteries.

Rectifier module	24V & 48V 0.9kW to 3.0kW
Solar charger module	48V, 2kW
Inverter modules	24Vdc > 110Vac & 230Vac, 1.6kVA 48V > 110Vac & 230Vac, 1.6kVA
DC-DC converters	12V, 24V, 48V, 0.5kW
Rectifier systems	48V, 0.9kW to 384kW 24V, 1.4kW to 179kW
Inverter systems	24V > 110V & 230V 1kVA standalone 24V > 110V & 230V 51.2kVA, modular 48V > 110V & 230V 1kVA standalone 48V > 110V & 230V 51.2kVA, modular
Solar systems	48V, 24kW
Sealed LA batteries	12V 55Ah, 80Ah, 100Ah, 180Ah, 210Ah
Lithium batteries	48V, 100Ah 19" mount or 150Ah tray mount
Outdoor enclosures	Single & Double Bay. Power + Equip HEX, DX, Forced Air



Eaton industrial offering

Eaton 93PS IP42 Industrial Upgrade Kit

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

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

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

Normal operation



Alarm



Eaton 93PS user display

For user safety and convenience, the 93PS displays a range of coloured 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





Brightlayer Data Centre Suite

Distributed IT Performance Management (DITPM)

Monitor assets at the edge

If your team's also responsible for managing and maintaining distributed IT equipment like PDUs and UPSs across multiple locations—from retail stores to healthcare, educational and governmental facilities—you know how time consuming that responsibility can be.

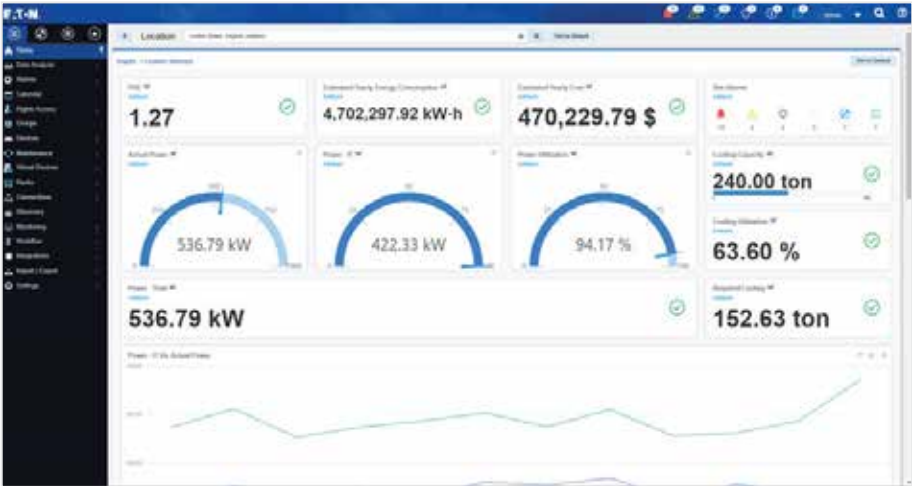
When essential equipment unexpectedly goes down at a remote site, you must fix the problem quickly to minimise the impact to your organisation's bottom line.

That's hard to do—especially if you don't have skilled, on-site IT resources.

Distributed IT Performance Management (DITPM) software allows you to remotely manage and control network-connected assets, regardless of the vendor or their location. It provides full visibility into your equipment, and enables you to remotely troubleshoot and resolve issues, and update firmware to gain efficiencies that save time and money.

Know what's happening across your distributed IT environment

- **View real-time reports**, trend charts and dashboards, and receive real-time alerts that are prioritised by severity and escalated when needed.




Access real-time information on how your system is performing by location.

Quickly troubleshoot and resolve equipment issues to reduce truck rolls

- **Remotely control PDU outlets and UPS load segments**—regardless of the vendor—powercycle devices, diagnose and take proactive corrective action when needed.
- **Automate device response and/or shutdown** during critical power events or environmental stress conditions, such as high temperature, to protect equipment.

Fine-tune your operation

- **Update and configure Eaton rackmount PDU and rackmount UPS network cards** in minutes, eliminating the need for in-person updates.
- **Use reports, trend charts, dashboards and visualisations** to understand power utilisation, alarm frequency, power connections and more.



UPS Battery Report - MJW

Row Limit

10000

Date Range

2023-04-04 - 2023-04-04

Sort By

Device Group

Public,Texas Medical Center East

Type	Manufacturer	Model	Device Name	Output Load (%)	Seconds On Battery (sec)	Last Replace Date	Battery Time Remaining (sec)	Serial Number	Temperature (°F)
UPS - Rackmount	Eaton	SP1000R	Rack UPS Office 09 - SP1000	66	1362	2021-03-21 19:00:00 EDT	1681	G33483992	79
UPS - Rackmount	Eaton	SP1000R	Rack UPS Office 02 - SP1000	24	1000	2022-06-14 19:00:00 EDT	1663	G33483975	69
UPS - Rackmount	Eaton	SP1000R	Rack UPS - SP1000 - 19	48	1571	2021-03-21 19:00:00 EDT	1548	G33483992	81
UPS - Rackmount	Eaton	SP1000R	Rack UPS Office 07 - SP1000	64	1878	2021-03-21 19:00:00 EDT	1544	G33483980	55

Public,Texas Medical Center West

Type	Manufacturer	Model	Device Name	Output Load (%)	Seconds On Battery (sec)	Last Replace Date	Battery Time Remaining (sec)	Serial Number	Temperature (°F)
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Battery health report predicts remaining battery life so you can proactively replace them before they fail.

Data Center Performance Management (DCPM)

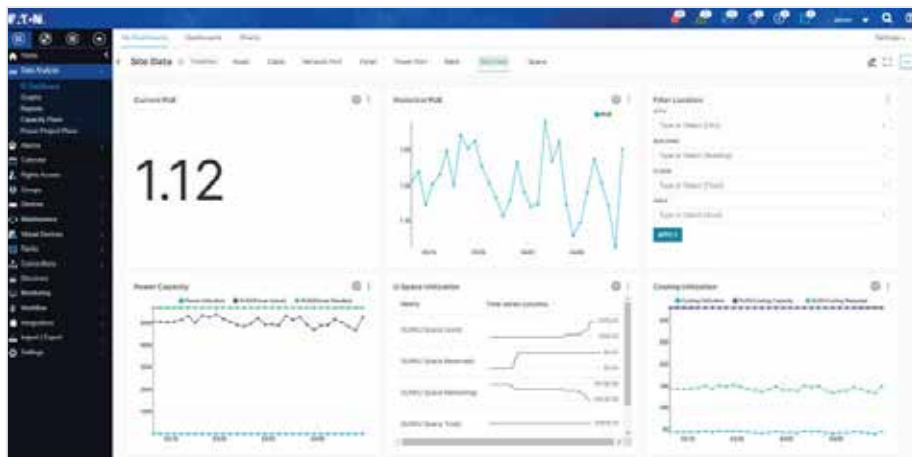
Go beyond data centre infrastructure management

Effectively managing a data centre requires more than just managing and monitoring your power, space and cooling resources. You need meaningful insights so you can make more impactful decisions that will keep your operation running while enabling you to manage its performance like never before.

With Data Center Performance Management (DCPM) software, you can gain efficiencies, make sense of your data and create a unified, configurable solution with the capabilities you need.

Manage and monitor assets to gain efficiencies

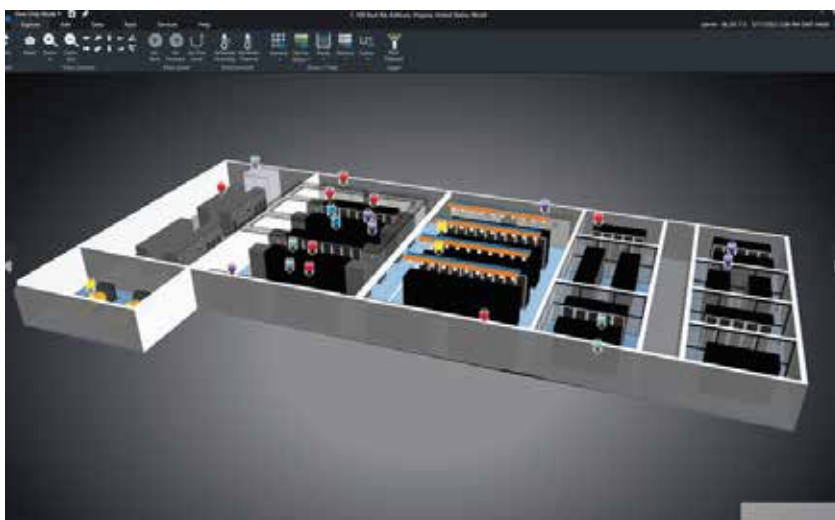
- **Manage your end-to-end power chain**, and know where your assets are located and what the environmental conditions are across one or more facilities to minimise operational costs and stranded capacity.
- **Centrally track asset lifecycle for IT and OT assets**, and reduce operational costs with real-time data and automated alerts.
- **View real-time and historical data** regardless of device vendor, vintage or protocol, and receive automated, customised alerts via text message, email reports and/or system notifications when issues arise. You decide when and how you're notified and if an alert should be escalated via a notification chain.



Monitor power, space and cooling resources over time to identify trends and outliers that need to be addressed.

Take data centre infrastructure management to the next level

- **Visualise your data centre**—from a campus or facility to a room, rack or device—with user-defined 2D and 3D visualisations for temperature and humidity, electrical utilisation, critical power chain and more so you can make informed decisions.
- **Access more than 80 standard reports** with an optional business intelligence dashboard that provides user-defined report tools and a flexible visualisation of alarms, asset capacity, efficiency, metrics, service and systems for near real-time visibility into key performance indicators, such as power usage effectiveness (PUE) and capacity utilisation, so you can ensure your data centre is operating as expected.



3D visualisation tool provides rack-level insights.

Integrate with your existing software to create a unified solution

- **Integrate with VMware and other software you're already using**, such as building management system (BMS), configuration management database (CMDB) and IT service management (ITSM) applications, to create a unified, cohesive software solution that improves efficiency, increases productivity and data accuracy, improves decision making and reduces costs.

Electrical Power Monitoring System (EPMS)

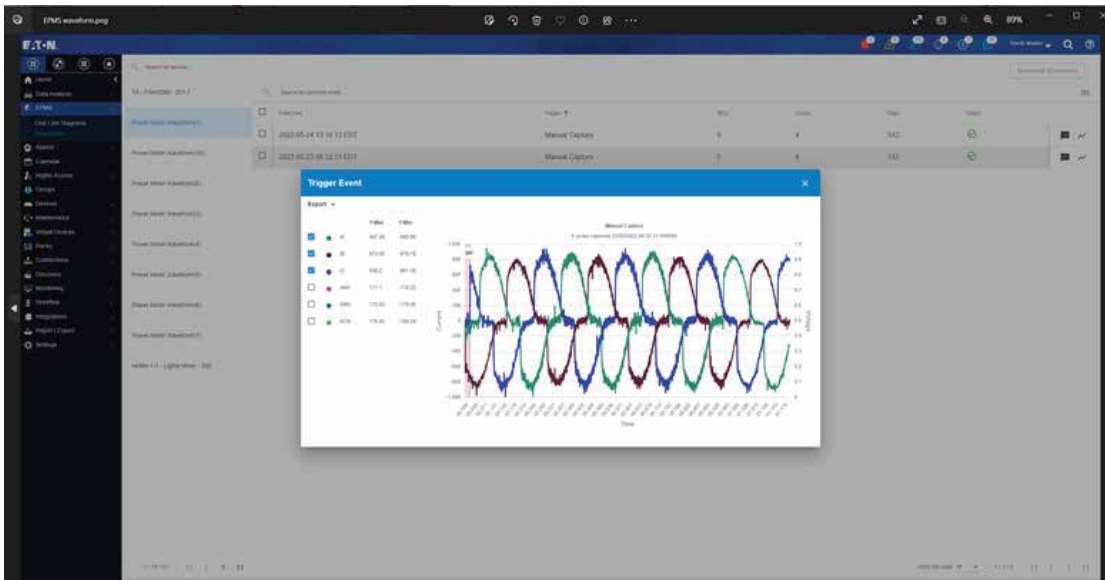
Avoid unplanned downtime, reduce operating costs and meet sustainability goals

As the demand for data continues to rise at the same time data centres are increasingly transitioning to renewable energy sources and setting short- and long-term energy consumption reduction goals, it's essential to have complete insight into real-time energy consumption and trended data, and be able to quickly resolve power issues when trouble strikes.

With Electrical Power Monitoring System (EPMS) software, you can maximise data centre uptime, quickly resolve and identify the root-cause of unexpected issues, and understand your facility's use of water, air, gas, electricity and steam (WAGES) to reduce consumption or change usage patterns.

Quickly resolve issues and identify root-causes

- **Expedite analysis, identify and resolve issues**, and prevent reoccurrence through comprehensive power quality and waveform analysis, a historical high-resolution dataset and custom one-line diagrams.
- **Push notifications** can also be sent to other software management systems to further streamline management.



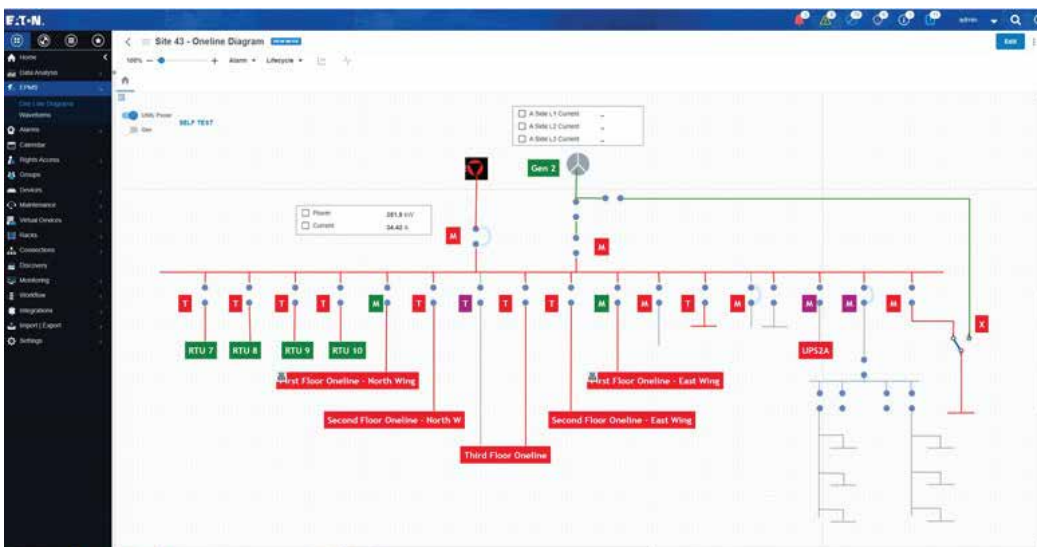
Waveform analysis allows you to identify, trace and analyse power quality events to quickly resolve and prevent occurrence.

Understand resource consumption

- **Get clarity and insight into where and when energy is flowing** through your facility to help make decisions, reduce or change consumption patterns, and lower utility costs.
- **View stored, normalised data for review and analysis**, compliance reporting and accurate change management forecasting.

Maximise facility uptime

- **By monitoring all aspects of an electrical system and normalising the data** for review and analysis, you can understand the operational behavior of your facility and identify outliers to proactively mitigate potential outage-causing issues.



One-line diagrams provide a simple view of your facility's electrical distribution infrastructure.

Brightlayer Data Centres Suite Product Comparison

The table below provides an overview of the key features included in our Distributed IT Performance Management (DITPM), Data Center Performance Management (DCPM) and Electrical Power Monitoring System (EPMS) software.

Feature	DITPM		DCPM		EPMS
	Essential	Advanced	Essential	Advanced	Essential
Installation and architecture					
Full installer and OVF formats	✓	✓	✓	✓	✓
Multi-server architecture to accommodate scale	✓	✓	✓	✓	✓
Asset management					
30,000+ model definitions		✓	✓	✓	✓
Bulk device management	✓	✓	✓	✓	✓
Auto-discovery engine for asset creation	✓	✓	✓	✓	✓
Visual rack building		✓	✓	✓	
Rack audit tools				✓	
Service and warranty event calendars			✓	✓	
Location and floorplan studio		✓	✓	✓	✓
Extensible attribute manager for user-defined attributes	✓	✓	✓	✓	✓
Calculated or derived attribute functions	✓	✓	✓	✓	✓
Device firmware and configuration jobs (Eaton & Tripp Lite devices only)	✓	✓	✓	✓	✓
Eaton UPS lifecycle tracking (5P, 5PX, 9PX, 9SX UPSs)	✓	✓	✓	✓	
Monitoring					
SNMP (v1, v2c, v3), Modbus TCP, Bacnet IP, OPC UA/DA, IPMI and MQTT data collection	✓	✓	✓	✓	✓
Support for any device type and manufacturer	✓	✓	✓	✓	✓
Up to five minute data collection	✓	✓	✓	✓	✓
Up to one minute data collection		✓	✓	✓	✓
Up to 30 second data collection			✓	✓	✓
Up to one second data collection					✓
Alarms and notifications					
Centralised alarm panel with status change history	✓	✓	✓	✓	✓
Smart alarm configurations to manage connected device alarm storms		✓		✓	
User-defined alarms for five alarm levels	✓	✓	✓	✓	✓
Simple and compound alarm trigger rules	✓	✓	✓	✓	✓
SMTP and SMS notification delivery formats	✓	✓	✓	✓	✓
Unlimited escalation rules	✓	✓	✓	✓	✓
User and group notification recipients	✓	✓	✓	✓	✓
SNMP trap forward and SNMP trap delivery	✓	✓	✓	✓	✓
Custom script execution on alarm events	✓	✓	✓	✓	✓
Integration					
REST API library	✓	✓	✓	✓	
Application framework to extend menus for integrated third-party data views	✓	✓	✓	✓	
CSV mapping tool for third-party data synchronisation*	✓	✓	✓	✓	
Camera studio to manage networked cameras for real-time video and playback		✓	✓	✓	

Feature	DITPM		DCPM		EPMS
	Essential	Advanced	Essential	Advanced	Essential
Advanced electrical					
Dynamic one-line diagrams					✓
Power meter waveform captures					✓
Industry-standard electrical reports					✓
Infrastructure cabling					
Power cable definitions		✓	✓	✓	✓
Network cable definitions		✓	✓	✓	✓
Fiber inside and outside plant definitions				✓	
Circuit trace views			✓	✓	✓
Power root cause and impact analysis				✓	
Network root cause and impact analysis				✓	
Workflow					
Project creation with approval cycles				✓	
Task management: install, move, decommission, port connect and port disconnect				✓	
Floor and rack space reservations				✓	
Work order approvals and routing				✓	
Reporting					
User-defined home screen and dashboard studio for visibility into critical location or device data	✓	✓	✓	✓	✓
Trend charts with predictive views	✓	✓	✓	✓	✓
Out-of-the-box report templates	✓	✓	✓	✓	✓
User-defined reports	✓	✓	✓	✓	✓
Scheduled delivery rules	✓	✓	✓	✓	✓
Business intelligence dashboard*	✓	✓	✓	✓	✓
Capacity planning and analysis with what-if controls		✓		✓	
Application security					
Cybersecurity hardening with coverity and black duck code scans	✓	✓	✓	✓	✓
Two-factor authentication	✓	✓	✓	✓	✓
User rights access for multi-tenancy	✓	✓	✓	✓	✓
Detailed calendar of all device and user events for accountability	✓	✓	✓	✓	✓
Web interface access with https	✓	✓	✓	✓	✓
IT automations					
VMWare cluster, host and guest integration*	✓	✓	✓	✓	
Hyper-V cluster, host and guest integration*	✓	✓	✓	✓	
Nutanix cluster, host, guest integration*	✓	✓	✓	✓	
Windows Linux server shutdowns*	✓	✓	✓	✓	
IT device console access with embedded SSH client		✓	✓	✓	

* Available as a software extension

Intelligent Power Manager (IPM)

Integrated power management software for virtual environments



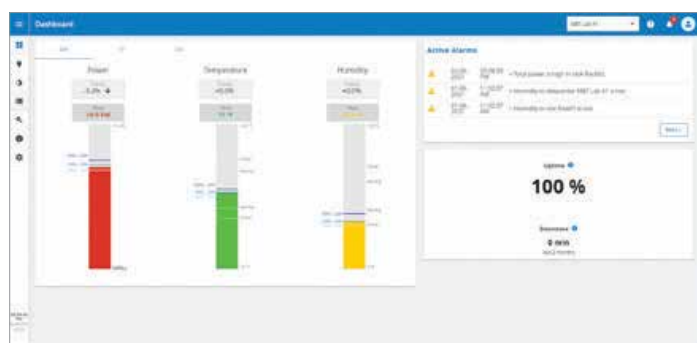
Intelligent Power Manager (IPM) software for disaster avoidance application provides the tools needed to monitor and manage power equipment in physical or virtual environments to keep IT devices running during a power or environmental event.

This innovative HTML5-based solution ensures system uptime and data integrity by allowing you to remotely monitor, manage and control devices on your network. IPM provides a solution that is easy to use, maintains business continuity and allows you to do more with less.

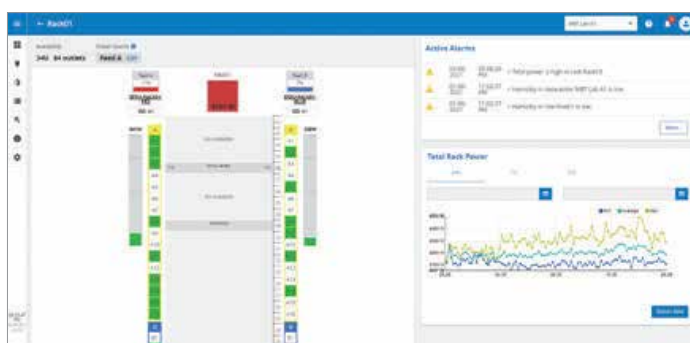
Achieve more with less: Reduce capital expenses	Maintain business continuity: Minimise operating expenses	Protect remote sites: Automate business continuity at the edge
<ul style="list-style-type: none"> Less initial upfront batteries: Increase your runtime via software limiting the hardware to be purchased and deployed. Reduced battery replacement required: Use fewer batteries to minimise future battery maintenance and replacement. Promote a greener environment: Consume less energy and recycle fewer batteries. 	<ul style="list-style-type: none"> Intelligent load shedding: Increase system uptime while extending battery runtime and minimising generator load by suspending non-critical virtual machines. Site Recovery Manager failover: Reduce data recovery expenses by synching primary and disaster recovery sites prior to power failures. Power capping on demand: Keep critical workloads running longer during a power outage by limiting server power consumption. 	<ul style="list-style-type: none"> Within cluster: Host IPM within your cluster to avoid needing additional IT equipment for your power management software. Complex system protection: Configure IPM to gracefully shutdown all your IT equipment in the order required to assure safe and quick recovery from power or environmental outages. Automated protection: IT personnel not required on site; remote sites can be set up and managed from a central location.

Features	IPM Monitor	IPM Manage	IPM Optimize
Contextual visibility of power metrics and constraints	✓	✓	✓
Monitor Eaton and third-party power devices	✓	✓	✓
Manage and update Eaton power devices		✓	✓
Define basic business continuity automations with host level actions		✓	✓
Simple Wizard-based automation configuration		✓	✓
Define advanced business continuity automations with VM and cluster level actions			✓

IPM dashboard



IPM rack view



Eaton alliance partners

Eaton understands that power protection is only one aspect of IT environments. By partnering with the industry's leading global IT providers, Eaton helps harness the full power of data centres. Together with alliance partners, Eaton aims to solve even the most complex IT challenges, while continuing to provide the ultimate in power protection.





An aerial night view of a city skyline, likely New York City, with numerous skyscrapers illuminated. A white network of lines connects various points across the image, with bright starburst effects at the connection nodes. A semi-transparent orange rectangle is positioned in the center, containing the title text.

Connectivity Cards and Surge Protection Devices

UPS Connectivity Cards

Eaton's full range of network connectivity devices enables you to remotely monitor and manage your power quality equipment. From outlet by outlet energy consumption reports to temperature and humidity readings, connectivity devices give you full control of your IT environment from offsite. This high level of awareness and control allows you to take full advantage of helping ensure business continuity.

Network Management Cards

NETWORK-M3

Eaton's latest network management card, the Gigabit Network Card (Network-M3), gives IT professionals enhanced management and cybersecurity capabilities. With a zero-trust architecture and compatibility with powerful automation and remote and on-site management tools, the Gigabit Network Card boosts the performance and uptime of your critical business systems.

The Gigabit Network Card is compatible with the Brightlayer Data Centre suite software. When used together, these hardware/software solutions protect data and preserve business continuity with automated actions during power events, such as graceful shutdown and the reallocation of virtual machines.



Industrial Network Cards

INDGW-M2

Industrial Gateway Card is compatible with the Modbus communications protocol.

The card enhances the protection given by the UPS by providing real-time monitoring of the UPS system and environment through a Building Management System (BMS) or Industrial Automation System (IAS). The card allows facility managers to monitor the state of the UPS, power conditions, temperature and humidity within the UPS network, enabling early warning of any threats to the system.



Industrial Gateway Card

INDGW-X2

Eaton Gigabit Industrial Gateway X2 Card

The Eaton Gigabit Industrial Gateway X2 Card (INDGW-X2) is Eaton's latest UPS connectivity device that delivers industrial professionals with new and exciting capabilities and features. The first UPS network card to meet both UL 2900-1 and IEC 62443-4-2 cybersecurity standards, the Gigabit Industrial Gateway X2 Card improves power system reliability by providing warnings of pending issues to administrators and helping to perform orderly graceful shutdown of servers and storage.



- **Gigabit speed:** compatible with better performing, cost effective and widely deployed gigabit network switches
- **Compliance** with Gigabit only data centre networks
- **Cybersecurity** enhancements for UL 2900-1 and IEC 62443-4-2 certifications, including stronger encryption, configurable password policy and X.509 Public Key Infrastructure
- **Real-time clock** with battery backup and linkage to NTP (Network Time Protocol) server
- **Increased memory** for improved operation and larger data storage
- **Advanced Management** with RESTful API over HTTPS
- **Secure SMTP** for email alerts

UPS Connectivity Cards

Relay Cards

Relay card MS (Relay-MS)

Provides communication through voltage free relays or RS-232.

- Installation in Eaton Mini-slot Enhancement Bay
- 1 x 9-pin Dsub connector
- 1 x RS232 or 5 x Relay output / 1 x Input



Industrial relay card MS (INDRELAY-MS)

Provides communication through voltage free relays.

- Installation in Mini-slot Enhancement Bay
- Terminal connectors, 250 VAC/5A rating
- 5 x Relay output / 1 x Input



X-Slot Cards

X-Slot Industrial Relay Card (XSLOTINDRELAY)

Provides communication through voltage free contacts.

- Installation in Eaton X-Slot Enhancement Bay
- Terminal blocks
- 4 Switching Relays (both NO and NC)
- 250 Vac, 30Vdc@5A. Terminal block wire size range 16-24 AWG



X-Slot Modbus Card (103005425-5591)

Provides Modbus RTU communication.

- Installation in Eaton X-Slot Enhancement Bay
- Modbus/JBUS (RTU, RS232 & RS485)
- 3 x 9-pin Dsub connectors; 5 wire terminal block
- Configuration through RS232 and DIP switches



Other devices

Monitoring Probe

The new EMP maintains all the functionality of the previous generation of sensors (temperature, humidity and dry-contact monitoring) while adding the ability to be daisy-chained (up to 3 per host), allowing multiple sensor connection to a single host.



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 SPD3i
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



For more information, visit
Eaton.com/au/UPS
Eaton.com/nz/UPS