Eaton 93PM UPS

30-250 kVA

Maximum energy efficiency. Minimum operating costs.

Lowest total cost of ownership

- Up to 97% efficiency level in double conversion mode -significant savings in operational costs.
- > 99% superior efficiency is delivered in Energy Saver System mode (ESS).
- Maximal power and energy density ensures a compact footprint.

Highly scalable and reliable

- Scalable, modular architecture and 'Pay as you grow' capability minimises CapEx.
- Eaton's unique Hot Sync wireless paralleling and internal redundancy ensures maximum availability and high reliability.

Easy deployment

- Thermal management support allows for flexible installation against the wall, in rows and in hot/cold aisle configurations.
- Easy access allows fast MTTR (mean time to repair).

Easy management

- Intelligent Power® software integrates with leading virtualisation management systems for monitoring and managing.
- The intuitive touchscreen LCD user interface and visual data logging provides clear information on the UPS status.
- Cyber-resilient (third party certified) connectivity.

Key Applications

- Small, medium and large data centres
- Finance and banking critical infrastructure
- Commercial buildings and industrial complexes
- Healthcare
- Telecommunications installations
- Process control equipment

EU CODE OF CONDUCT ELITE UPS

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Eaton 93PM UPS 30-250 kVA

Technical specifications

General	
UPS output power rating	30-200 kW range (p.f. 1.0) 60-250 kVA range (pf 0.9)
Efficiency in double conversion mode	Up to 97 %
Efficiency in Energy Saver System (ESS)[1]	> 99%
External paralleling capability	Up to 8 units
Inverter/rectifier topology	Transformer-free 3-level IGBT-converter
Audible noise	30-60 kVA: <60 dBA 80-250 kVA: <65 dBA ESS operation: <47 dBA
Operating Altitude	1000 m without de-rating. Max. 2000 m

Input	
Input wiring	3ph + N + PE
Nominal voltage and frequency rating	380 V; 400 V; 415 V 50Hz/60Hz
Input Power Factor	0.99
Input ITHD	30 kW range: <5% 40-250 kVA range: <3%
Soft start capability	Yes
Internal backfeed protection	Yes

Output	
Output wiring	3ph + N + PE
Nominal voltage and frequency rating	380 V; 400 V; 415 V 50Hz/60Hz
Load power factor range	0.8 lagging – 0.8 leading
Output UTHD	< 1.5%

Battery	
Battery type	VRLA
Charging method	Advanced Battery Management (ABM) or float
Temperature compensated charging	Option
Battery start capability	Yes
Alternative backup power technologies	Wet cell batteries NiCd batteries Li-Ion batteries Supercapacitors

1. Additional information on ESS performance, refer to 93PM UPS Technical Specification.

Options and accessories

Internal and external batteries or supercapacitors

Integrated battery breaker or external Battery breaker enclosures for rack batteries

Integrated manual bypass switch and external wrap-around maintenance bypass

Top air exhaust kit for against-the wall or back-to-back installation

30-150 kVA range: Bottom or rear cable access as standard. Top cable access with optional kit
160-250 kVA range: Bottom, rear and top cable access as standard

30-200 kW (1.0pf) range: Separate battery per power module for battery redundancy and easier scalability

Sync control for synchronising the output of two separate UPS systems

Power Conditioner mode

Frequency converter mode

Connectivity	
Native relay inputs/outputs	5 relay inputs and dedicated EPO 1 relay output More relay contacts available as option.
Software	Eaton Intelligent Power Manager Eaton Intelligent Power Protector
Gigabit Network card (NETWORK-M2)	Web/SNMP Third party certified cybersecurity Up to 3 optional sensors (EMPDT1H1C2): Temperature, humidity and two status inputs
Industrial Gateway card (INDGW-M2)	Web/SNMP/Modbus RTU and TCP Third party certified cybersecurity Up to 3 optional sensors (EMPDT1H1C2): Temperature, humidity and two status inputs
Power Xpert UPS Minislot card (PXGMSUPS)	Web/SNMP/Modbus RTU and TCP/BACnet IP Optional Sensor (EMP001): Temperature, humidity and two status inputs
Industrial Relay-MS card (INDRELAY-MS)	5 relay outputs / 1 relay input

Compliance with standarts	
Safety	IEC 62040-1; CB certified
EMC	IEC 62040-2
Performance	IEC 62040-3
RoHS	EU directive 2011/65/EU
WEEE	EU directive 2012/19/EU

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

Eaton 93PM 30-250 kVA range

93PM Frame	Available Ratings	Rated output p.f.	Internal battery	Dimensions (WxDxH)	Weight
93PM-50	30 kW, 40 kW, 50 kW	1	10-30 min full load runtime	560 x 914 x 1876	870 kg
93PM-60	60 kVA	0.9	10 min full load runtime	560 x 914 x 1876	870 kg
93PM-100	40 kW, 50 kW; scalable to 100 kW 40+40 kW, 50+50 kW; N+1 Internal redundancy 80 kW, 100 kW	1.0		560 x 914 x 1876	267 kg 338 kg 338 kg
93PM-120	60 kVA; scalable to 120 kVA 60+60 kVA; N+1 internal redundancy 120 kVA	0.9		560 x 914 x 1876	267 kg 338 kg 338 kg
93PM-150	40 kW, 50 kW; scalable to 150 kW 80 kW, 100 kW; scalable to 150 kW 80+40 kW, 100+50 kW; N+1 internal redundancy 120 kW, 150 kW	1.0		560 x 914 x 1876	279 kg 341 kg 438 kg 438 kg
93PM-200	40 kW, 50 kW; scalable to 200 kW 80 kW, 100 kW; scalable to 200 kW 120 kW, 150 kW; scalable to 200 kW 120+40 kW, 150+50 kW; N+1 internal redundancy 160 kW, 200 kW	1.0		760 x 914 x 1876	346 kg 408 kg 471 kg 556 kg 556 kg
93PM-250	60 kVA, 120 kVA, 180 kVA; scalable to 250 kVA 120+60 kVA, 180+60 kVA; N+1 internal redundancy 250 kVA	0.9		760 x 914 x 1876	346 kg - 471 kg 471 kg - 556 kg 556 kg

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