

# Eaton 93PM UPS

30-250 kVA



## Key Applications

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

## Maximum energy efficiency. Minimum operating costs.

### Lowest total cost of ownership

- The 93PM UPS sets new standards, with an operating efficiency level of up to 97% double conversion mode resulting in 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.



Powering Business Worldwide

# 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) <sup>1</sup>	> 99%
External paralleling capability	30-200 kW range: Up to 8 units 60-250 kVA range: Up to 4 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.

## 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

## 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
PXGMS-card (Power Xpert Gateway-MS)	Web/SNMP/Modbus RTU and TCP/BACnet IP Temperature, humidity and two status inputs through Environmental Monitoring Probe (Option)
Network-MS	Web/SNMP Temperature, humidity and two status inputs through Environmental Monitoring Probe (option)
Industrial Relay-MS card (INDRELAY-MS)	5 relay outputs / 1 relay input

## Compliance with standards

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 improvement programmes, specifications are subject to change without notice.