

Eaton 93PM UPS

30–200 kW



Maximum energy efficiency. Minimum operating costs.

Lowest total cost of ownership

- The 93PM UPS sets new standards, with an operating level of up to 97% in 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

- The 93PM UPS comes with Web and SNMP interfaces as standard.
- Intelligent Power® software integrates with leading virtualisation management systems for monitoring and managing.
- The intuitive user LCD interface and visual data logging provides clear information on the UPS status.



Key applications

- Small, medium and large data centres
- Modular and virtualised data centres
- Mission-critical applications
- IT infrastructure



Powering Business Worldwide

Eaton 93PM UPS 30–200 kW

Technical specifications

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

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

Battery	
Battery type	VRLA
Charging method	ABM technology or Float
Temperature compensation	Optional
Battery nominal voltage (VRLA)	432 V (36 x 12 V, 216 cells) or
	480 V (40 x 12 V, 240 cells)
Note: Strings with different battery voltage may not be paralleled!	
Charging current maximum	30–50 kW 22 A
	80–100 kW 44 A
	120–150 kW 66 A
	160–200 kW 88 A
Battery start capability	Yes

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

Accessories
External battery cabinets with long-life batteries,
External maintenance bypass switch, integrated manual bypass,
MiniSlot connectivity (Web/SNMP, ModBus/Jbus, Relay)

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

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

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

Part number	Description	Rating	Full load runtime	Dimension (WxDxH)	Weight (with battery)
P-105000007-005	93PM-30(50)-BB-6x9Ah	30 kW	20 min	560 x 914 x 1876	890 kg
P-105000007-020	93PM-40(50)-BB-6x9Ah	40 kW	15 min	560 x 914 x 1876	890 kg
P-105000007-034	93PM-50(50)-BB-6x9Ah	50 kW	10 min	560 x 914 x 1876	890 kg

Part number	Description	Rating	Dimension (WxDxH)	Weight (with battery)
P-105000011-001	93PM-50(100)-N+1	50 kW N+1	560 x 914 x 1876	338 kg
P-105000011-005	93PM-80(100)	80 kW	560 x 914 x 1876	338 kg
P-105000011-009	93PM-100(100)	100 kW	560 x 914 x 1876	338 kg
P-105000014-001	93PM-100(150)-N+1	100 kW N+1	560 x 914 x 1876	438 kg
P-105000014-005	93PM-120(150)	120 kW	560 x 914 x 1876	438 kg
P-105000014-009	93PM-150(150)	150 kW	560 x 914 x 1876	438 kg
P-105000016-001	93PM-150(200)-N+1	150 kW N+1	760 x 914 x 1876	556 kg
P-105000016-002	93PM-160(200)	160 kW	760 x 914 x 1876	556 kg
P-105000016-003	93PM-200(200)	200 kW	760 x 914 x 1876	556 kg