Eaton 93PM G2 UPS

50-360 kVA



Key applications

- · Colocation data centers
- Medium and large data centers
- · Finance and banking critical infrastructure
- Commercial buildings and industrial complexes
- Healthcare
- Telecommunications installations
- Process control equipment



Highest availability, at the lowest total cost of ownership

Lowest Total Cost of Ownership (TCO)

- Highest efficiency in its power range with up to 97% efficiency in double conversion mode and >99 % efficiency in Energy Saver System mode
- High efficiency even when UPS load levels are low, optimized by Variable Module Management System (VMMS)
- Maximal power and energy density ensures a compact footprint
- EnergyAware ready Revenue from a necessary investment

Ultimate resiliency

- HotSync® patented load-sharing technology eliminates risk of single point of failure
- Equipped with ultra-rapid fuses in the Static Switch

 ensuring safety in all scenarios
- Equipped with a backfeed contactor

 no need for additional installments

Higly scalable and easy deployment

- Modularity Hot swappable power modules can be replaced or added while other modules continue protecting the load
- Thermal management allows for flexible installation against the wall, in rows and in hot/cold aisle configurations

Easy management

- Wide range of connectivity options (Web/SNMP, Modbus/Jbus, relay contacts)
- Intelligent Power® software integrates with leading virtualization management systems for monitoring and managing
- The intuitive touchscreen LCD user interface and visual data logging provides clear information on the UPS status
- Cyber-secure (third party certified) connectivity



Eaton 93PM G2 UPS 50-360 kVA

Technical specifications

General			
UPS output power rating	50-300 kW (PF 1.0)		
	60-360 kVA (PF 0.9)		
Power module power rating	50 kW (PF 1.0)		
	60 kVA (PF 0.9)		
Efficiency in double conversion mode	up to 97%		
Efficiency in Energy Saver System (ESS)	> 99%1		
Inverter/rectifier topology	Transformer-free IGBT with PWM		
Paralleling capability	Up to 4 units		
UPS topology	Online / Double conversion		
UPS dimensions (width x depth, height)	800 x 990 x 1987 mm		
UPS Degree of protection	IP 20		
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		
Rated input frequency	50 or 60 Hz, user configurable		
Frequency tolerance	40 to 72 Hz		
Input Power Factor	0.99		
Input ITHD	< 2,5%		
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)	384-528 V (32-44 blocks)		
Battery start capability	Yes		
Alternative backup power technologies	Li-ion batteries, NiCd batteries,		
	Wet cell batteries, Supercapacitors		

^{1.} IEC 62040-3 Class 3 output

Output	50-300 kW (PF 1.0)	60-360 kVA 60-360 kVA (PF 0.9)		
Output wiring	3ph + N + PE			
Nominal voltage rating (configurable)	220/380, 230/400, 2	220/380, 230/400, 240/415 V 50/60 Hz		
Output UTHD	<1% (100% linear load) <3% (reference non-linear load)			
Overload on inverter	60 min 110%	10 min 110%		
	10 min 125%	1 min 125%		
	60 s 150%	10 s 150%		
Overload when bypass available	Continuous <125% /	<115%		
	Note: Bypass fuses may limit the overload capability!			

Options and accessories

 ${\it External\ cabinets\ with\ VRLA\ batteries,\ Li-ion\ batteries\ or\ Supercapacitors}$

Top air exhaust kit (front to top airflow)

Integrated Maintenance bypass switch (200 kW frame)

Sync control for synchronizing the output of two separate UPS systems

MiniSlot connectivity (Network/SNMP, Modbus/Jbus, Relay)

Power Conditioner mode

Frequency Converter mode

Communications		
MiniSlot	4 communication bays	
Serial ports	Built-in host and device USB	
Relay inputs/outputs	5 relay inputs and dedicated EPO 1 relay output	
Software	Eaton Intelligent Power Manager Eaton Intelligent Power Protector	
Compliance with standarts		
Safety (CB certified)	IEC 62040-1	
EMC	IEC 62040-2	
Performance	IEC 62040-3	
RoHS	EU directive 2015/863/EU	
WEEE	EU directive 2012/19/EU	

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

Eaton 93PM 50-300 kW (PF 1.0) range

Model	Rating	Power module qty	Dimensions	Weight
93PM-G2-50(200)	50 kW	1	800 x 990 x 1987 mm	361 kg
93PM-G2-100(200)	100 kW	2	800 x 990 x 1987 mm	404 kg
93PM-G2-150(200)	150 kW	3	800 x 990 x 1987 mm	447 kg
93PM-G2-200(200)	200 kW	4	800 x 990 x 1987 mm	490 kg
93PM-G2-250(300)	250 kW	5	800 x 990 x 1987 mm	533 kg
93PM-G2-300(300)	300 kW	6	800 x 990 x 1987 mm	576 kg

Eaton 93PM 60-360 kVA (PF 0.9) range

Model	Rating	Power module qty	Dimensions	Weight
93PM-G2-60(240)	60 kVA	1	800 x 990 x 1987 mm	361 kg
93PM-G2-120(240)	120 kVA	2	800 x 990 x 1987 mm	404 kg
93PM-G2-180(240)	180 kVA	3	800 x 990 x 1987 mm	447 kg
93PM-G2-240(240)	240 kVA	4	800 x 990 x 1987 mm	490 kg
93PM-G2-300(360)	300 kVA	5	800 x 990 x 1987 mm	533 kg
93PM-G2-360(360)	360 kVA	6	800 x 990 x 1987 mm	576 kg

