

Eaton 93PS UPS

8-10 kW



Key applications

- IT applications:
 - Server rooms
 - Localised Data centres
- Mission critical applications:
 - Manufacturing/Industrial facilities
 - Transportation
 - Retail Buildings
 - Healthcare
 - Telecommunication
 - Government

Lowest total cost of ownership (TCO)

- Highest efficiency in its power range with above 96% efficiency in double conversion mode and up to 99% efficiency in Energy Saver System mode
- Scalable by paralleling up to 4 units
- Smallest footprint on the market, footprint only 0.25 m²
- Unity power factor (1.0), providing more real power than many of its rivals

Maximum availability

- HotSync[®] patented load-sharing technology enables parallel operation of units without communication or loadshare signals. Eliminating the communication link eliminates the risk of single point of failure
- Equipped with ultra-rapid fuses in the Static Switch
 - ensuring safety in all scenarios
- Equipped with backfeed protection
 - no need for additional installments
- Advanced Battery Management – Intelligent battery charging to keep your batteries safe and in good condition
- The 93PS and Eaton's Intelligent Power Manager[®] software suite takes the resiliency of the system to the next level by bridging the electrical and IT infrastructure



Powering Business Worldwide

Technical specification

General

Model rating (1.0 p.f.)	8 kW	10 kW
Model catalogue reference	93PS-8(10)-0-MBS or 93PS-8(10)-1x9Ah-MBS	93PS-10(10)-0-MBS or 93PS-10(10)-1x9Ah-MBS
Number of internal batteries	0 or 1 x 32 blocks	0 or 1 x 32 blocks
Upgradability	Yes, to 10kW	No
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) mode	Up to 99%	
UPS dimensions (width x depth x height)	335 x 750 x 950 mm	
UPS Degree of protection	IP 20	
Acoustic noise at 1 m, in 25 °C ambient temperature	< 54 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	
RoHS/WEEE compliancy	Yes	

Input

Model rating (1.0 p.f.)	8 kW	10 kW
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	
Rated input r.m.s. current:		
380V	13 A	16 A
400V	12 A	15 A
415V	12 A	15 A
Soft start capability	Yes	
Back feed protection	Yes, for rectifier and bypass lines	

Output

Model rating (1.0 p.f.)	8 kW	10 kW
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	< 1.5%	
100% non-linear load	< 3.5%	
Rated output power	8 kW / 8 kVA	10 kW / 10 kVA
Overload capability:		
On inverter	10 min 102-110% load 60 sec 111-125% load 10 sec 126-150% load 300 ms >150% load	
On bypass	Continuous < 125% load 20 ms 1000% load	
Rated input r.m.s. current:		
380V	13 A	16 A
400V	12 A	15 A
415V	12 A	15 A
Load power factor:		
Rated	1.0	
Permitted range	0.8 lagging to 0.8 leading	

Battery

Model rating (1.0 p.f.)	
Battery technology	12 V, VRLA
Battery design life	5 years
Battery quantity:	
Internal	32 blocks, 192 cells per battery string
External	28-40 blocks per string
Battery voltage:	
Internal	384 V
External	336V – 480V
Nominal Ah capacity (C10)	9Ah
Charge current limit	Default 5A, configurable Maximum 12.5A
Battery start option	Yes

Communication circuits

Model rating (1.0 p.f.)	
MiniSlots	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

Model rating (1.0 p.f.)	
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