



ИБП Eaton 91PS-10(10)-1x9Ah-MBS (91PS10MBSI) - Eaton 91PS и 93PS 8-10 кВт - Брошюра

Постоянная ссылка на страницу: <https://eaton-power.ru/catalog/eaton-91ps/eaton-91ps-10-10-1x9ah-mbs/>

# Eaton 91PS and 93PS UPS

8-10 kW

1:1

3:1

3:3



## 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 m<sup>2</sup>
- 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
- Eaton 91PS/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.)                             | Eaton 91PS   | Eaton 93PS   |
|---|--|--|
| Model catalogue reference                           | 91PS-8(10)-0-MBS<br>91PS-8(10)-1x9Ah-MBS<br>91PS-10(10)-0-MBS<br>91PS-10(10)-1x9Ah-MBS                         | 93PS-8(10)-0-MBS or<br>93PS-8(10)-1x9Ah-MBS<br>93PS-10(10)-0-MBS or<br>93PS-10(10)-1x9Ah-MBS |
| Number of internal batteries                        | 0 or 1 x 32 blocks   |  |
| Upgradability                                       | Yes, to 10 kW  |  |
| External paralleling                                | Up to 4 units with HotSync technology  |  |
| UPS topology  | Double conversion, 3-level IGBT converters   |  |
| 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<br>< 47 dBA in ESS   |  |
| Maximum service altitude                            | 1000 m (3300 ft) above sea level at 40 °C<br>Maximum 2000 m (6600 ft) with<br>1 % derating per each add. 100 m |  |

## Input

| Model rating (1.0 p.f.)                               | Eaton 91PS   | Eaton 93PS                      |
|---|--|---------------------------------|
| Input wiring  | <b>3:1</b> 3 phases + neutral<br><b>1:1</b> 1 phase + neutral                | 3 phases + neutral              |
| Rated input r.m.s. current:                           | <b>3:1</b> 220/380 V; 230/400 V; 240/415 V<br><b>1:1</b> 220 V; 230 V; 240 V | 220/380 V; 230/400 V; 240/415 V |
| Input ITHD:<br>Resistive load<br>Non-linear load      | 8 kW < 4.0% and 10 kW < 3.5%<br>8 kW < 6.5% and 10 kW < 5.5%                 |                                 |
| Voltage tolerance:<br>Rectifier input<br>Bypass input | 187 to 276 V<br>rated voltage -15% / +10%                                    |                                 |
| Rated input frequency                                 | 50 or 60 Hz, user configurable   |                                 |
| Frequency tolerance                                   | 40 to 72 Hz  |                                 |
| Input power factor                                    | 0.99   |                                 |
| Soft start capability                                 | Yes  |                                 |
| Internal Back feed protection                         | Yes, for rectifier and bypass lines  |                                 |

## Output

| Model rating (1.0 p.f.)                                  | Eaton 91PS   | Eaton 93PS                          |
|--|--|-------------------------------------|
| Output wiring  | 1 phase + neutral  | 3 phases + neutral                  |
| Rated output voltage                                     | 220 V; 230 V; 240 V  | 220/380 V; 230/400 V;<br>240/415 V, |
| Output UTHD:<br>100% linear load<br>100% non-linear load | < 1.5%<br>< 2.5%   |                                     |
| Rated output power                                       | 8 kW / 8 kVA or 10 kW / 10 kVA   |                                     |
| Overload capability:<br>On inverter                      | 10 min 102-110% load<br>60 sec 111-125% load<br>10 sec 126-150% load<br>300 ms > 150 % |                                     |
| On bypass  | Continuous < 125% load<br>20 ms 1000% load   |                                     |
| Load power factor:<br>Rated<br>Permitted range           | 1.0<br>0.8 lagging to 0.8 leading  |                                     |

1. IEC 62040-3 Class 3 output

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

## Battery

| Models with internal batteries            |  |
|---|--|
| Battery technology                        | 12 V, VRLA   |
| Nominal Ah capacity (C10)                 | 9Ah  |
| Battery design life                       | 5 years  |
| Battery quantity:<br>Internal<br>External | 32 blocks, 192 cells per battery string<br>28-40 blocks per string               |
| Battery voltage:<br>Internal<br>External  | 384 V<br>336 V – 480 V   |
| Charging method                           | ABM technology or Float  |
| Charge current limit                      | Default 5A, configurable<br>Maximum 12.5A  |
| Battery start option                      | Yes  |
| Alternative energy source technologies    | Wet cell batteries<br>NiCd batteries<br>Lithium-ion batteries<br>Supercapacitors |

## Communication

|                             |  |
|-----------------------------|--|
| 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

|                       |                         |
|-----------------------|-------------------------|
| 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 |