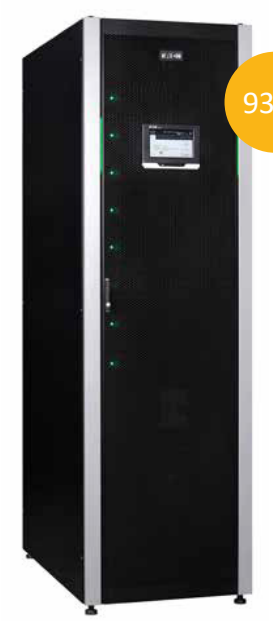
Eaton Power Xpert 93PR

25 kW to 125 kW



Best Reliability for IT space

Total capacity in parallel upto 1000 kW

Power factor 1

The Dashboard:

Best in Class Efficiency

96.3%

Double conversion efficiency

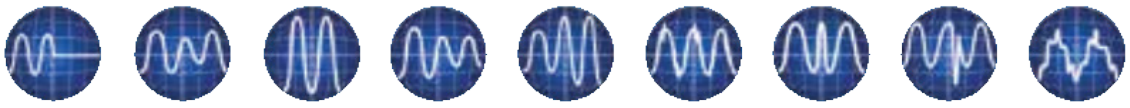
40°C without de-rating
Native N+1, N+2

Best in Class Footprint

99.3%

ESS efficiency

3 Levels IGBT 2ms
MTTR=10 min



Power Failure | Power Sag | Power Surge | Under-Voltage | Over-voltage | Line Noise | Frequency variation | Switching Transient | Harmonic Distortion

Key Features:

- Modular and Transformer free Design
- Scalable (Off and On premises)
- Easy modules replacement 28Kg
- Hot swappable / scalable modules
  - 19" rack size
  - VRLA and LIB ready
- WEB / SNMP / MODBUS communication
- Top and bottom cable entry
- Critical components redundancy

Key Patents:

- ESS Energy Saver System
- VMMS Variable Module Management
- HotSync® spofless technology
- ECT Easy Capacity Test
- ABM Advanced battery management
- Easy sync control

The UPM Advantage:

- Enhanced reliability with 3 level IGBT
- Patented method for load sharing (Hot-Synch)
- Peer-to-peer control strategy
- Each UPM/unit synchronises independently
- No SPOF - single point of failure
- Ensure vertical and horizontal upgrade
- No 'master-slave' configuration
- No load share signals
- Selective tripping

Powering Business Worldwide

Eaton 93PR 25-50-75-100-125 kW Technical Specification as per IEC 62040-3

General

Ratings	25 kW	50 kW	75 kW	100 kW	125 kW
UPS option	With Back-Feed & Without Bac-Feed				
Frames Capacity	125 kW Frame				
Upgradability	Upto 125 kW				
Upgradability	Upto 125 kW				
External paralleling	Up to 8 units with HotSync technology				
UPS performance classification	VFI-SS-111				

EFFICIENCY & HEAT DISSIPATION

Ratings	25 kW	50 kW	75 kW	100 kW	125 kW
Efficiency in double-conversion, rated linear load					
100% load	95.0%	95.0%	95.0%	95.6%	95.6%
75% load	95.3%	95.3%	95.3%	96.1%	96.1%
50% load	95.5%	95.5%	95.5%	96.3%	96.3%
25% load	94.5%	94.5%	94.5%	95.7%	95.7%
Heat dissipation (watt) in double conversion					
100% load	1316	2632	3947	4603	5753
75% load	987	1974	2961	3206	4008
50% load	616	1233	1849	2029	2536
25% load	364	728	1091	1178	1473

INPUT CHARACTERISTICS

Ratings	25 kW	50 kW	75 kW	100 kW	125 kW
Rated input voltage Voltage tolerance Rectifier input Voltage tolerance Bypass input	220/380 V; 230/400 V; 240/415 V 305 to 478 V rated voltage -15% / +10%				
Rated input frequency Frequency tolerance	50 or 60 Hz, user configurable 40 to 72 Hz				
Number of input phases Rectifier input Bypass input	3 phases + neutral 3 phases + neutral				
Input pow er factor, double conversion 100% load	> 0.99				
Maximum input r.m.s. current	45	90 A	135 A	180 A	225 A
Input current distortion at rated input current	< 3%, 100% load < 3%, 75% load <5%, 50% load <10%, 25% load				
Rectifier ramp-up, rectifier start and load step	5 A/s (default), configurable. Minimum 1 A/s.				

BYPASS CHARACTERISTICS

Ratings	25 kW	50 kW	75 kW	100 kW	125 kW
Type of bypass	Static				
Bypass rating	125 kW				
Bypass voltage range	220/380 V; 230/400 V; 240/415 V tolerance -15% / +10% of rated voltage				
Transfer time break	No break in Synchronized Conditions 2 ms typical under Unsynchronized Conditions				
Maintenance bypass	Inbuilt & without both available				

MECHANICAL PARAMETER

Ratings	25 kW	50 kW	75 kW	100 kW	125 kW
UPS dimensions (W x D x H)	603 x 1013 x 2050 mm				
Weight, UPS frame w/o UPM	425 kg				
Weight, UPM (power module)	28 kg (< 25 kg w /o fan panel & DC capacitors)				
UPS Degree of protection	IP 20				
UPS colour	Black; RAL 9005				

ENVIRONMENTAL PARAMETER

Ratings	25 kW	50 kW	75 kW	100 kW	125 kW
Acoustic noise at 1 m, in 25 °C ambient temperature	< 70 dBA in double conversion < 55 dBA in ESS				
Ambient service temperature range UPS Internal battery	0 °C to + 40 °C w ithout output pow er derating + 20 °C to + 25 °C recommended for optimized battery life time				
Relative humidity range	5 to 95%, no condensation allowed				
Maximum service altitude	1000 m (3300 ft) above sea level at 40 °C Maximum 2000 m (6600 ft) w ith 1 % derating per each add. 100 m				

OUTPUT CHARACTERISTICS

Ratings	25 kW	50 kW	75 kW	100 kW	125 kW
Number of output phases	3 phases + neutral				
Crest factor	3				
Rated output voltage	220/380 V; 230/400 V; 240/415 V, configurable				
Output voltage variation, steady state	< 1%				
Total voltage harmonic distortion 100% linear load 100% non-linear load	 < 1% < 5%				
Maximum frequency range for synchronization with bypass	± 4 Hz as default. User settable 0,5 to 5 Hz.				
Maximum synchronized phase error	< 1° with static balanced load				
Maximum slew-rate when synchronizing	1 Hz/s				
Overload capability On inverter	10 min 102-110% load @ Unity PF Load 60 sec 111-125% load @ Unity PF Load 10 sec 126-150% load @ Unity PF Load 60 Min 102-110% load @ 0.9 PF Load 10 Min 111-125% load @ 0.9 PF Load 60 sec 126-150% load @ 0.9 PF Load 300 ms >150% load				
Load power factor Rated Permitted range	1.0 0.8 lagging to 0.8 leading				

BATTERY CHARACTERISTICS

Ratings	25 kW	50 kW	75 kW	100 kW	125 kW
Battery technology	12 V, VRLA/Lithium ION				
Battery quantity	36 to 44 blocks, 216 to 264 cells per battery string 400Vdc minimum cut-off				
Battery voltage	432 to 528 V, default				
Recharge profile	ABM or float				
Charge current limit	Default 5A, configurable, maximum 25A per UPM with derating to 60% Capacity with Charger current increamental				
Battery start option	Yes				

Powering Business Worldwide

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