

# Eaton 93PX UPS

15-20 kVA

1:1

3:1

3:3



## Key applications

- Commercial buildings and industrial complexes
- Industrial automation equipment
- Medical devices
- Healthcare
- IT infrastructure (High-density racks)
- Small and medium data centers
- Telecommunications installations

## Lowest Total Cost of Ownership (TCO)

- Highest efficiency in its product range with above 96 % efficiency in double conversion mode and up to 99 % efficiency in Energy Saver System mode
- Scalable by paralleling up to 3 units
- High power density, 3U high modules to save valuable rack space
- Unity power factor (1.0), providing more real power than many of its rivals

## Easy installation and management

- Flexible installation options
  - Rack or standalone installation
  - Versatile wiring options, all options in the same package 3:3, 3:1, 1:1 (input:output phase connections)
- Large touch screen display (with gravity sensor)
- Intelligent Power Manager is compatible with all major OS including virtualization software such as VMware and Hyper-V is included with each UPS
- Maintenance bypass modules available for easy maintenance and paralleling
- Cyber secure connectivity options available



Built-in gravity sensor that automatically rotates the screen based on UPS orientation.

## Connectivity



Eaton Gigabit Network Card



Eaton Gigabit Modbus Card



Environmental Monitoring Probe



Powering Business Worldwide

# Technical specifications

UPS power module	93PX 15 kVA	93PX 20 kVA
<b>Physical dimension</b>		
Dimension (H*W*D)	129 mm * 438 mm * 691 mm	
Net weight (Kg)	23.7	
<b>Environment</b>		
Operation temperature	0 °C ~ 50 °C (0 ~ 40 no derating, 40 °C ~ 50 °C derating to 50 %)	
Storage temperature	- 25 °C ~ 60 °C	
Relative humidity	0 ~ 95 %	
Operating altitude	0 ~ 4000 m (0 ~ 1000 m no derating, 1000 m ~ 4000 m the load derating 1 % every up 100 m)	
Noise level	≤ 55 dB	
<b>EBM (External Battery Module)</b>		
Dimension (H*W*D)	129 mm * 438 mm * 589 mm	
Net weight (Kg)	124.2	
<b>MBP (Maintenance Bypass)</b>		
Dimension (H*W*D)	129 mm * 438 mm * 489 mm	
Net weight (Kg)	21.5	
<b>Input</b>		
Rated input voltage	1 phase 220/230/240 V; 3 phase 380/400/415 V	
Input voltage range	160 V ~ 300 V full load; 100 ~ 160 V linear derating	
Rated input frequency	50 Hz / 60 Hz	
Input frequency range	40 Hz ~ 70 Hz	
Input frequency phase lock range	50 Hz system: 45 Hz - 55 Hz 60 Hz system: 54 Hz - 66 Hz	
System compatibility	TN-S / IT	
Input power factor (PF)	> 0.995 both 1 phase and 3 phases	
THDi	≤ 3 % linear load; ≤ 5 % non-linear load	

UPS power module	93PX 15 kVA	93PX 20 kVA
<b>Output</b>		
Input-output phase connection	Input-output 3-1, 3-3, 1-1	
Rated output voltage	1 phase 220/230/240 V; 3 phase 380/400/415 V	
Rated output frequency	50 Hz / 60 Hz	
Rated output appearance power	15 kVA	20 kVA
Rated output active power	15 kW	20 kW
Max PF	1	
Voltage variation	± 1 %	
THDV	≤ 1 % linear load; ≤ 3 % non-linear load	
Load crest ratio	≥ 3:1	
Output connection	Terminal block	
Overload capacity line mode (at rated voltage)	105 % < Load ≤ 125 % : 10 min 125 % < Load ≤ : 1 min > 150 % : 0.5 s	
<b>Battery and charger</b>		
Internal batteries	None. 1 pair of EBMs as minimum to provide backup time	
Max. quantity	6 pairs (2*6)	
Battery voltage	± 240 V (adjustable to ± 192 V for external battery solutions)	
Charging current	0 ~ 13 A adjust	
Recharging time	3 hours to 90 % (2 EBM)	
<b>Efficiency</b>		
Online mode	up to 96 %	
ECO or ESS mode	up to 98.8 %	
<b>Other working mode</b>		
Parallel mode	Maximum 3 (60 kVA/kW)	
<b>Interface</b>		
Display	Color touch LCD with gravity sensor	
Connectivity port	RS232 DB9; USB 2.0 type-B; programmable dry contacts in/out; 1 x Mini-Slot for comms cards	

## Backup time table

EBM quantity	Load	Backup time (Min) - 15 kVA	Backup time (Min) - 20 kVA
1 group (2*240 V EBM)	100 %	3.8	2.4
	75 %	5.7	3.8
	50 %	9.5	9.6
	25 %	23.5	24.9
2 group (2*2*240 V EBM)	100 %	13.8	8.5
	75 %	20.7	13.8
	50 %	35.1	25.4
	25 %	91.0	65.6
3 group (3*2*240 V EBM)	100 %	26.3	17.0
	75 %	39.4	26.3
	50 %	68.1	42.9
	25 %	179.3	98.7
4 group (4*2*240 V EBM)	100 %	39.8	25.1
	75 %	59.6	39.8
	50 %	104.3	67.2
	25 %	277.8	133.0

## Part number

Model	93PX 15 kVA	93PX 20 kVA
<b>Product description</b>	<b>Part number</b>	
UPS power module	93PX15KiPM	93PX20KiPM
External battery module 480 V	93PXEBM480 (contains 2 x (240 V, 3RU) modules each)	
MBP simple version	MBP20Ki	
MBP standard version	MBP20KiPDU	
MBP 1+1 parallel version	MBP20KiPARA	
Network card	Network-M2	
Modbus card	INDGW-M2	
Environmental monitoring probe	EMPDT1H1C2	
Netpack 9U (includes power module, EBM, rack kit and network card)	93PX15KIRTN	93PX20KIRTN