

Eaton 93PM UPS

Efficient. Scalable. Innovative.

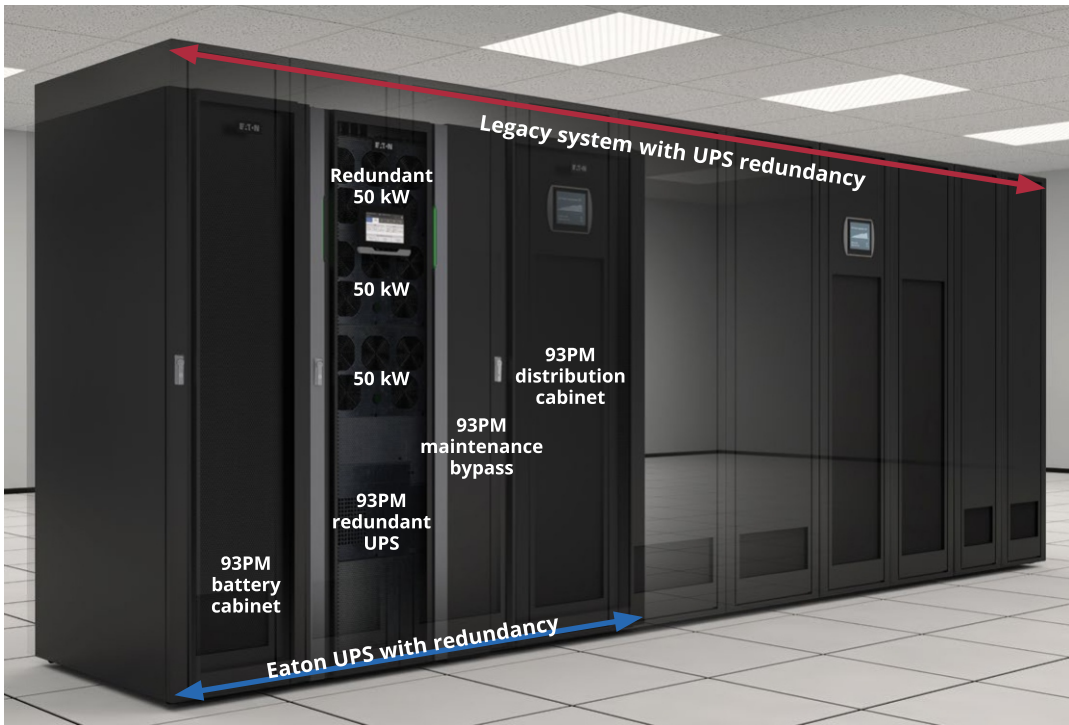


Powering Business Worldwide

93PM features and benefits



The Eaton 93PM UPS combines unprecedented efficiency and reliability with an innovative design. A space-saving, scalable and flexible device that's as easy to deploy as it is to manage, it's the perfect three-phase white or gray space solution for today's data center.



1. Lowest TCO (Total Cost of Ownership)

Conserves valuable data center floor space with its compact footprint and internal redundancy design.

Reduces cost and unexpected future growth risks with its vertical scalability, enabling you to scale as you grow.

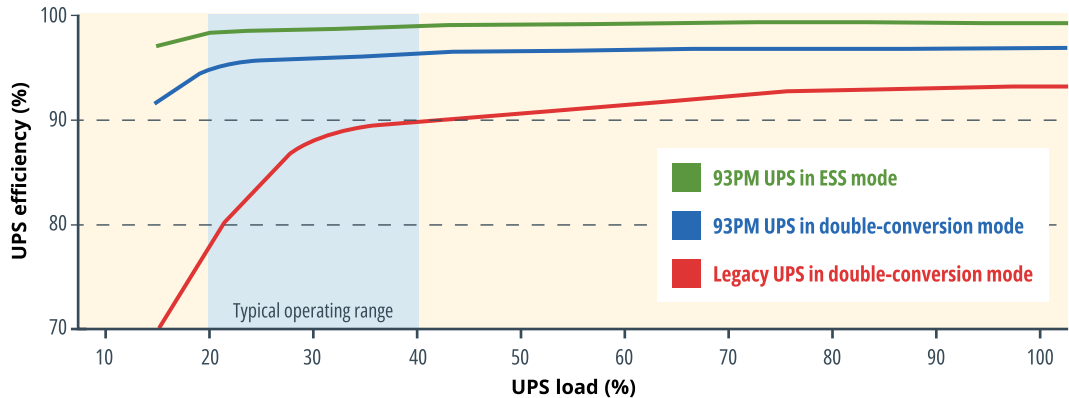
Reduces power and cooling OPEX through industry-leading energy efficiency.

Up to 99% efficiency in Energy Saver System (ESS) mode.

Up to 97% efficiency in double-conversion mode.

The 93PM's vertical scalability, internal redundancy and compact footprint make better use of valuable data center floor space.

93PM efficiency in ESS mode and double-conversion mode



The 93PM's ESS energy cost savings can pay for the UPS in less than three years.

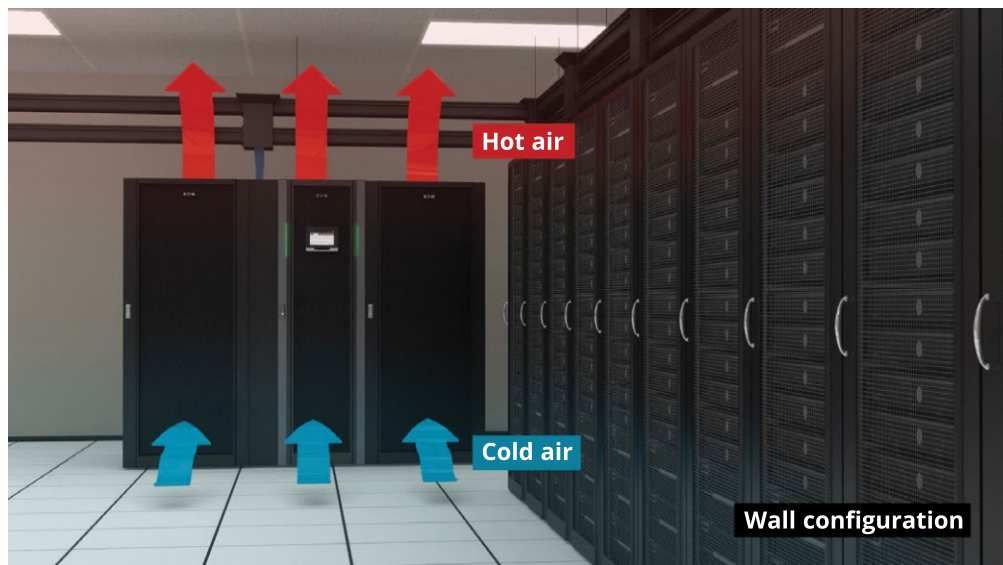
Learn more at:
Eaton.com/ESS

Efficiency savings comparison for 93PM versus legacy UPS

Load %	Legacy UPS double-conversion efficiency	93PM double-conversion efficiency	93PM double-conversion 10-year savings	93PM ESS efficiency	93PM ESS 10-year savings	10-year cost of keeping legacy UPS, including reduced efficiency and required battery replacement
25%	84.0%	95.8%	\$298,035	98.4%	\$354,093	\$404,093
50%	90.6%	96.8%	\$287,374	98.9%	\$376,542	\$426,542
75%	92.5%	97.0%	\$305,809	99.1%	\$439,015	\$489,015
100%	93.0%	96.8%	\$343,174	99.1%	\$538,100	\$588,100

Data shown for 93PM (480V) 400 kW UPS. Estimated efficiency savings calculated using January 2025 U.S. average commercial electricity cost of \$0.1289 per kWh (U.S. Energy Information Administration) and 80% cooling ratio. Estimated battery replacement cost for single replacement of VRLA batteries sized for 400 kW UPS. A legacy UPS will typically incur other increased costs not reflected here. Currency in U.S. dollars.

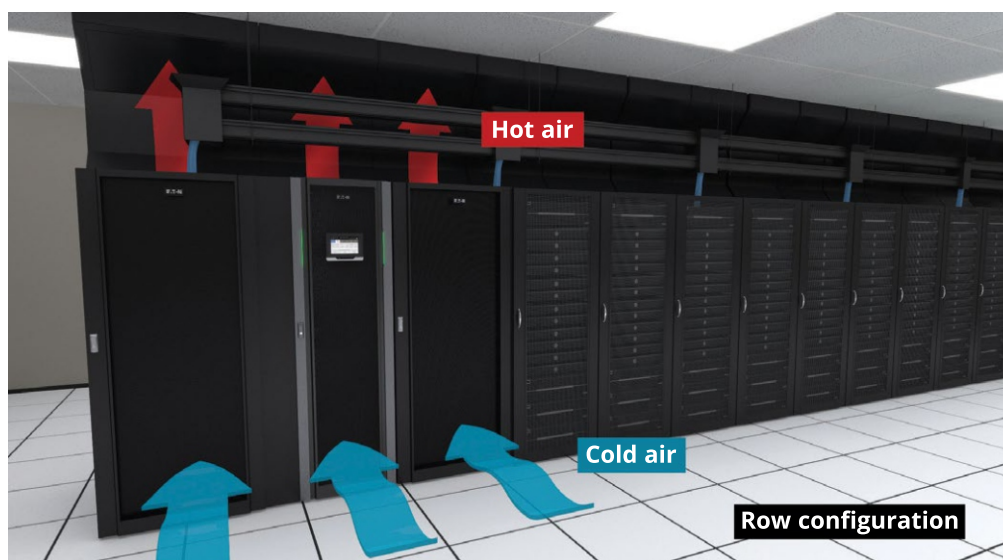
93PM features and benefits



2. Easy deployment

Maximizes deployment options by providing flexible configurability.

The 93PM supports front-to-top ventilation, ideal for against-the-wall configuration.



Front-to-top ventilation feature also makes the 93PM a perfect fit for in-row configurations that include slim chimneys.



The 93PM also supports front-to-back ventilation, making it great for hot/cold aisle configuration.

93PM features and benefits



Green light bars indicate a healthy UPS in normal mode.



Yellow light bars indicate battery or bypass.



Red light bars indicate UPS alerts.

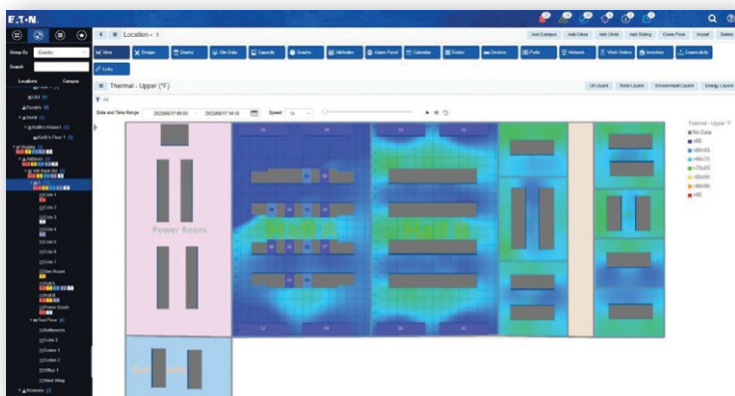
Large LED light bars display UPS status.

3. Easy management

Provides easier access to detailed status information through its large, user-friendly LCD touchscreen.

The 93PM's graphical LCD interface allows you to track stats on energy savings, battery time, outages, load profiles and much more.

In addition, large green, yellow and red LED light bars make system status easy to see from a distance, even inside dark and crowded data centers.



Data Center Performance Management (DCPM) software helps enterprise, colocation, multi-tenant, hyperscale and edge data centers improve operational efficiencies and maximize valuable space, power and cooling resources.

Integrates with the leading physical and virtual platforms through Brightlayer Data Centers suite software.

Designed for the most advanced IT environments, the 93PM supports optional communication cards that allow remote access via HTTP(S), SNMP, Modbus TCP/IP, Modbus RTU and BACnet IP protocols. In addition, Eaton's Brightlayer Data Centers suite gives you all the tools you need to manage power devices in your physical or virtual environment.

Learn more at:
Eaton.com/Brightlayer

Increases uptime through its 24/7 remote monitoring and reporting capabilities.

Eaton's Remote Monitoring Service, also known as PredictPulse™, provides real-time monitoring of the 93PM and alerts service technicians to take action when a problem is detected.

Learn more at:
Eaton.com/PredictPulse



Optional communication cards allow remote access through a variety of network and industrial protocols.

93PM features and benefits



The 93PM (480V) 250 kW frame supports up to five 50 kW power modules.

(93PM UPS systems support up to 400 kW, with 500 kW coming soon.)

4. Serviceable and scalable UPS design

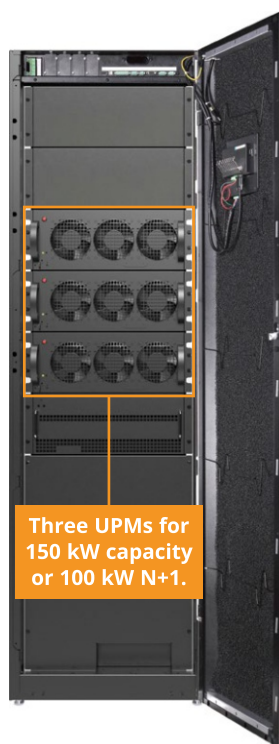
The 93PM's modular design enables quicker, easier service and scalable power capacity.

Swappable power modules with blind mate connectors require less time during service and replacement, so the UPS system can spend less time in bypass mode.

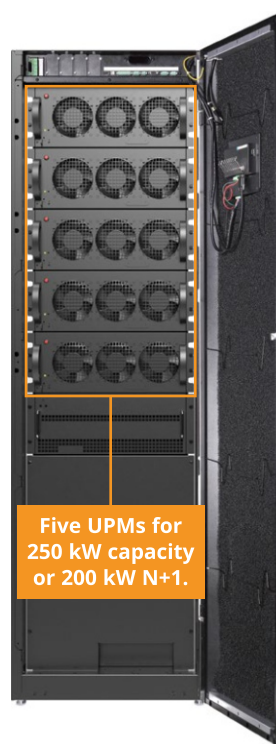
Swappable universal power modules (UPMs) make it easy to service your UPS system and scale capacity.



One UPM for 50 kW capacity.



Three UPMs for 150 kW capacity or 100 kW N+1.



Five UPMs for 250 kW capacity or 200 kW N+1.

Modular design allows you to scale capacity as needed, conserving capital and cash flow.

You can configure your UPS to meet your current power capacity requirements, then install additional power modules quickly and easily as your power capacity requirements grow with your business. Power modules can also be configured for N+1 redundancy.

The functional core of the 93PM UPS



Front view
(480V 250 kW unit)



Color LCD touchscreen detail

See an interactive demo of the LCD touchscreen at Eaton.com/93PM

A Color LCD touchscreen

User-friendly graphical LCD interface helps you profile loads and track energy savings, runtime, outages and more.

B LED status light bars

Green/yellow/red LEDs show system status from a distance, even in dark data centers.

C Swappable power modules

Independent control and power.

D Serviceable fan assembly

E Soft start controls

Contained in each power module.

F Static switch assembly

G Communications and connectivity

Built-in device and host USB.

Five alarm inputs and dedicated EPO.

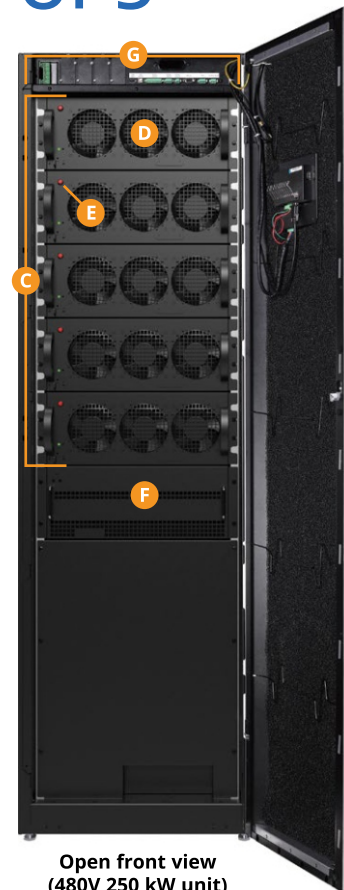
Alarm relay output.

Four slots for optional communication cards.

Eaton's Brightlayer Data Centers suite helps you monitor, manage and control IT and facility assets.

H Top or bottom cable entry

Available on select UPS models.



Open front view
(480V 250 kW unit)



Front view
(208V 200 kW unit)



Open front view
(208V 200 kW unit)

Comprehensive data center solutions



A Rackmount power distribution units (PDUs)

Reliable and manageable power distribution inside rack enclosures
Up to 36 kW per PDU

B Floor-standing power distribution units (PDUs)

Modular, efficient data center power distribution with intelligent monitoring
Up to 2,000 kVA per PDU
Static transfer switches and remote power panels also available

C VRLA batteries

Variety of cabinets and rack-mounted battery modules available

D End-of-row and facility UPS systems

Scalable, efficient and manageable backup power up to 2,250 kW

E Cooling and airflow management solutions

In-row, rackmount and portable cooling
Aisle containment systems

F Lithium-ion batteries

Cabinets and rack-mounted battery modules available

G Rackmount UPS systems

Reliable and manageable backup power up to 20 kW
VRLA and lithium-ion batteries available

H Eaton B-Line series cable tray and ladder systems

Route and organize high-density cabling efficiently

I KVMs and console servers

Access and control servers and other IT equipment locally or remotely

J Busway systems

Configurable overhead power distribution with intelligent monitoring

K Cables and connectivity

Copper and fiber network cables and patch panels
NEMA and IEC power cords, including high-temperature models

L Rack enclosures and open frame racks

Floor-standing models from 12U to 58U
Capacities up to 5,000 lb.

M Customized service plans

Optimize performance, maximize uptime and extend service life of UPS systems and other power management solutions

N Brightlayer software

Eaton's **Brightlayer Data Centers suite** helps monitor and manage IT and facility assets
Eaton's **Remote Monitoring Service** helps prevent downtime 24/7

Eaton 93PM UPS technical specifications

Power modules

Power offering	10 200 kW in 5 kW increments at 208/220V 50 250 kW in 50 kW increments at 380/400/415V and 480V 200 400 kW in 50 kW increments at 480V (Optional internal N+1 redundancy available)
----------------	--

General characteristics

Efficiency in Energy Saver System (ESS) mode	Up to 99%
Efficiency in double-conversion mode	Up to 97%
Parallel capability	Up to four distributed; contact factory for more information

Input characteristics

	480V UPS	380/400/415V UPS	208/220V UPS
Voltage (configured to order)	480/277V 3-phase (4-wire)	380/220V 3-phase (4-wire)	208/120V 3-phase (4-wire)
	480V 3-phase (3-wire)	400/230V 3-phase (4-wire)	220/127V 3-phase (4-wire)
	380/400/415V 3-phase (4-wire)	415/240V 3-phase (4-wire)	

Voltage range	+10%/-15%	+10%/-10%	+15%/-15% @ 208V, +10%/-15% @ 220V
---------------	-----------	-----------	---------------------------------------

Frequency range	50/60 Hz	50/60 Hz	50/60 Hz
-----------------	----------	----------	----------

Power factor	> .99	> .99	> .99
--------------	-------	-------	-------

Input current distortion	< 3% @ 100% load capacity	< 3% @ 100% load capacity	≤ 3.5% @ 100% load capacity
--------------------------	------------------------------	------------------------------	--------------------------------

Battery

	480V UPS	380/400/415V UPS	208/220V UPS
Battery voltage	432V, 480V (480V required for 480V 4-wire UPS)	480V	480V
Charging method	ABM* or float technology	ABM or float technology	ABM or float technology

Output

	480V UPS	380/400/415V UPS	208/220V UPS
Voltage (configured to order)	480V 3-phase (3-wire or 4-wire) 380/400/415V 3-phase (4-wire) 208/120V with IAC-D up to 200 kW	380/400/415V 3-phase (3-wire or 4-wire)	208V or 220V 3-phase (3-wire or 4-wire)
Frequency range	50/60 Hz	50/60 Hz	50/60 Hz
Regulation	±1% steady state	±1% steady state	±1% steady state
Voltage THD	< 1% (100% linear load) < 5% (non-linear load)	< 1% (100% linear load) < 5% (non-linear load)	< 1.6% (100% linear load) < 5% (non-linear load)
Load power factor range	Unity power factor with the ability to support 0.8 leading to 0.8 lagging without derating	Unity power factor with the ability to support 0.8 leading to 0.8 lagging without derating	Unity power factor with the ability to support 0.8 leading to 0.8 lagging without derating

Certification

	480V UPS	380/400/415V UPS	208/220V UPS
Safety	UL 1778, cULus, UL 924 Emergency, UL 924 Auxiliary	UL 1778, cULus	UL 1778, cULus
EMC	FCC Part 15 subpart B class A	FCC Part 15 subpart B class A	FCC Part 15 subpart B class A
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5

Optional accessories

Integrated maintenance bypass
Integrated distribution cabinets (with input and output transformer options)
Integrated power distribution cabinets
Integrated parallel tie cabinets
Integrated battery cabinets (small and large)
Wall mounted or floor-mounted bypass
Lithium-ion battery cabinets
Communication cards (Remote access via HTTPS, SNMP, Modbus TCP/IP, Modbus RTU and BACnet IP)
Brightlayer Data Centers suite

Eaton UPS services

Eaton UPS services encompass startup, preventive maintenance, extended warranties, battery and parts replacement, technical support, remote monitoring and lifecycle management. By reinforcing best practices for UPS performance and longevity, Eaton UPS services help you get the maximum ROI from your UPS.

Learn more at: [Eaton.com/UPSservices](https://www.eaton.com/UPSservices)

UL 924 certification

The 93PM meets the strict standards for UL 924 compliance for emergency lighting applications when ordered with an emergency lighting SKU.

Learn more at: [Eaton.com/UL924UPS](https://www.eaton.com/UL924UPS)

UPS dimensions

Height	74"
Depth	42"
Width	22 50 250 kW (480V and 380/400/415V) and 10 120 kW (208/220V) 34.4" 10 160 kW (208/220V) 43.3" 10 200 kW (208/220V) 64" 250 400 kW (480V from 200 400 kW models)

Due to continued improvements, all specifications are subject to change without notice.

Learn more at:
Eaton.com/93PM

Eaton is a registered trademark.

All other trademarks are property
of their respective owners.

