

Life Is On

Schneider  
Electric

# Symmetra MW

Scalable from 400 kW to 1600 kW  
Parallel-capable up to 6.4 MW



Ultra energy efficient, modular, scalable, three-phase power protection with industry-leading performance for large data centers and mission-critical environments

- Ultra-high efficiency (97%) in full protection mode
- Scalable power protection — pay as you grow
- Up to 97% efficient in 2N configurations with Efficiency Booster Mode
- Modular design provides inherent redundancy
- Now with Integrated Parallel up to 1 MW
- Universal battery support
- Low total cost of ownership
- Unity input power factor corrected
- Fault-tolerant, robust platform design
- Robust design protects a broad range of load types
- Parallel capable for capacity or redundancy
- Network manageable

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# Features and benefits

## Think big, think scalable — The world's largest modular UPS

Symmetra™ MW redefines high-power UPS technology as a modular, fault-tolerant UPS in the 400 – 1600 kW range. As the only UPS capable of scaling up to 1.6 MW in a single module and paralleling UPSs to provide up to 6.4 MW of power, Symmetra MW is ideal for large data centers or complete buildings. Symmetra MW is also ideally suited for healthcare and other critical facility protection requirements with rigorous and changing electrical demands. Setting a new standard for low cost of ownership, Symmetra MW delivers best-in-class efficiency and a reduction in rating of electrical infrastructure — wires, transformers, and even generators.

The Symmetra MW's modularity increases availability through internal N+1 configurability and multimodule paralleling features. The fault-tolerant design and predictive failure notification provide further reliability. Slide-in/out power modules, manageable external batteries, and self-diagnosing features greatly reduce mean time to repair. Symmetra MW provides a customizable system in a standardized design for any large, on-demand, and network-critical physical infrastructure.

## Ultra-high efficiency for medium to large data centers, buildings, and facilities

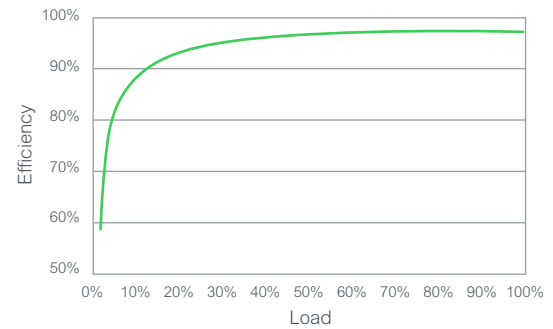
At the national average rate of \$0.10/Watt, a 1600 kW Symmetra MW can save \$46,000/year compared to a 1600 kW UPS with 94% efficiency.\*

Using power at 97% efficiency in full protection mode reduces the power cost per watt delivered to critical equipment by preventing electrical losses.

Ultra-high efficiency means less heat rejection, lower cooling costs, and reduced overall total cost of ownership.

- 97% efficient at > 85% load (850 kW load on 1 MW)
- 96% efficient at > 45% load (450 kW load on 1 MW)
- 94% efficient at > 24% load (240 kW load on 1 MW)

\*Figures calculated using APC™ by Schneider Electric™ UPS Efficiency Comparison Calculator.



Curve fit to measured efficiency data. All measurements taken in normal operating mode, at typical environmental conditions, with nominal electrical input and balanced resistive load (PF = 1.0) output.

## Accessories

### UPSync

Synchronize multiple independent modules or parallel systems automatically when supplying downstream Static Transfer Switches

### Mega-Tie

Mega-Tie can be used in 2N UPS configurations to seamlessly transfer the load from one output bus to another, allowing for maintenance on the isolated system without the need to transfer to bypass

### EPO

Provides a single point of emergency equipment shutdown for up to eight APC InfraStruxure™ devices and one third-party device



### Kits

Air filter



Relay I/O board



TCP/IP modbus gateway





# Symmetra MW features

## 1. Ultra-high efficiency in full protection mode

With over 97% efficiency at full load, 96.6% efficiency at 50% load, and above 94% efficiency at 25% load, Symmetra MW delivers significant electrical cost savings without putting the load at risk.

## 2. Modular design

Available power can be scaled to optimize loading or allow expansion as needed — you can buy for the future and populate the UPS for the current load.

- Modular design allows N+1 redundancy in the single-module unit
- Paralleling capability allows N+1 redundancy at the system level

## 3. 10-inch LCD touch screen

Provides a complete system overview with audible and visible alarms; graphs and text descriptions display system status, power flow, and metering information.

## 4. Fault-tolerant design

Built-in redundancies prevent individual component failures from affecting the load; standardized power modules ensure robust performance, easy maintenance, and rapid repairs without jeopardizing the critical load.

## 5. Robust delta-conversion platform

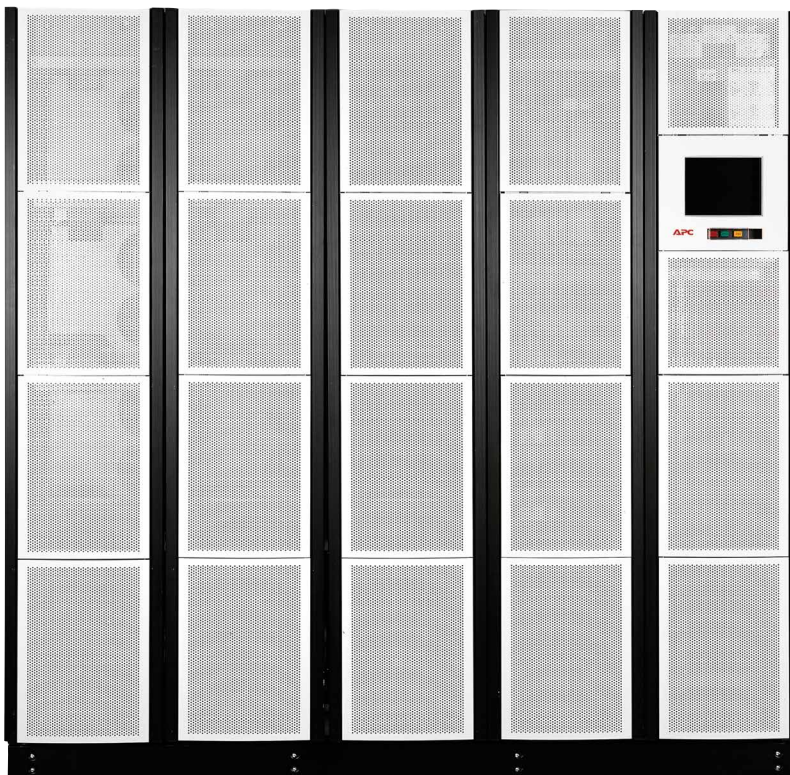
- Online topology constantly provides conditioned power
- High overload capability (200% for 60 seconds, 125% for 10 minutes, 150% on battery for 30 seconds)
- High fault-clearing capability (200 kAIC short-circuit withstand rating)

## 6. Unity power factor corrected

Lowers infrastructure and generator costs

## 7. 200 kW power modules

Modular, scalable power makes it easy to pay as you grow; standardized modules simplify repair and replacement strategy — one service engineer can easily add or replace modules.



# Technical specifications

## 400 V Symmetra MW


(kW/kVA)	400	600	800	1000	800	1000	1200	1400	1600
Input									
	Integrated parallel, 400 – 1000 kVA				Centralized parallel, 800 – 1600 kVA				
Nominal input voltage	400 V								
Grid system	3PH+G, 3PH+PEN, 3PH+N+G								
Voltage range	+/-15%								
Frequency	50 hz								
Frequency range	+/-8%								
Power factor (PF)	1								
I thd (full load)	<5% at full load								
Nominal input current	602	896	1203	1494	1203	1494	1793	2091	2390
Maximum input current	733	1100	1466	1833	1466	1833	2200	2566	2933
Maximum short circuit withstand (kA)	200								
Output									
	Integrated bypass for 400-1000 kva				External bypass under 800 -1600				
Power rating	400 kVA	600 kVA	800 kVA	1000 kVA	800 kVA	1000 kVA	1200 kVA	1400 kVA	1600 kVA
Voltage (nominal)	400 V								
Nominal output current (A)	578	866	1155	1443	1155	1433	1732	2021	2309
Frequency	50 Hz								
Overload (normal and battery operation)	200% for 60 seconds 125% for 10 minutes On battery: 150% for 30 seconds								
V thd	3% max at linear load								
Efficiency									
AC-AC at nominal mains	97% @ 100% load; 96.6% @ 50% load; 93.5% @ 25% load								
Environmental									
Storage temperature, UPS, and batteries	-20 to 40 °C (-4 to 113 °F)								
Operating temperature*	0 to 40 °C (32 to 104 °F)								
Operating relative humidity	0 – 95% noncondensing								
Operating altitude	0 – 1000 m (0 – 3280 ft) @ full load								
Regulatory compliance									
Approvals	CE, ISO9001, ISO14001								
EMC/EMI/RFI	EN50091-2, IEC62040-3								

\*For optimum battery life, the operating temperature range is 18 to 27 °C (64 to 80 °F)

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