

Product data sheet

Specifications



Symmetra PX 500kW Scalable to 500kW without Maintenance Bypass or Distribution-Parallel Capable

SY500K500D

Overview

Presentation	A high-performance, 3-phase, modular, scalable, power protection solution with industry-leading efficiency, capacity, and performance for medium to large data centers and mission-critical environments. Multiple UPSs can be installed in parallel for ultra-efficient system redundancy or up to 2MW of power protection. Parallel installations with custom switchgear and installations using a 3rd-party maintenance bypass panel require the APC Symmetra PX250/500 Third Party Switchgear Kit for breaker monitoring and EPO functionality.
Lead time	Usually Ships within 6 Weeks

Main

Main Input Voltage	480 V 3 phase 400 V 3 phase
Other Input Voltage	415 V
Main Output Voltage	480 V 3 phase 400 V 3 phase
Other Output Voltage	380 V 415 V
Rated power in W	500000 W
Rated power in VA	500000 VA
Output connector type	Hard Wire 4-wire (3PH + G) 1 Hard Wire 5-wire (3PH + N + G) 1
Battery Type	VRLA
Provided equipment	Assembly service Installation guide Network Management Card Start-Up Service User Manual

Batteries & Runtime

Included Battery Modules	32
Battery Slots Empty	0
Typical recharge time	3.5 h
RBC Quantity	6
Overload Operation	10 minutes @ 125% and 60 seconds @ 150%
Battery Charge Power (Watts)	47262 W rated
Battery design life	5...8 year(s)
Battery power in VAH	165888 VAh runtime
Battery option	SYBFXR8-8 1 207360 VAh

Extendable Run Time 1

General

Bypass Voltage Tolerance +/-10% settable from +/-4/6/8 and 10%

Number of power module free slots 0

Number of power module filled slots 20

Redundant Yes

Physical

Color Black

Height 78.39 in (199.1 cm)

Width 188.98 in (480 cm)

Depth 42.13 in (107 cm)

Product Weight 17985.33 lb(US) (8158 kg)

USB compatible No

Input

Input Frequency 40 - 70 Hz auto-sensing

Number of input connectors
 1 Hard Wire 4-wire (3PH + G)
 1 Hard Wire 5-wire (3PH + N + G)

Efficiency at full load
 340...460 V 400 V
 408...552 V 480 V

Maximum Short Circuit Withstand (Icw) 50 kA

Input Total Harmonic Distortion Less than 5% for full load

Input protection type 3-pole breaker

Load power factor 0.5 leading to 0.5 lagging

Input Power Factor at Full Load 0.99

Output

Max Configurable Power (Watts) 500000 W

Harmonic distortion Less than 2%

Output Frequency (sync to mains)
 50 Hz sync to mains
 60 Hz +/- 0.1 % for 60 Hz nominal not synced
 50 Hz +/- 0.1 % for 50 Hz nominal not synced
 60 Hz sync to mains

Topology Double Conversion Online

Waveform Type Sine wave

Output voltage tolerance +/-1% static and +/- 5% at 100% load step

Output Voltage THD
 < 2% linear load and < 3% non-linear load
 10 minutes @ 125% and 60 seconds @ 150%

Bypass type
 Built-in Static Bypass
 96 % in battery operation)

Maximum configurable power in VA 500000 VA

Transfer Time	2ms typical
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Conformance

Product Certifications	cUL Listed Eurobat General Purpose UL Listed
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Standards	CSA C22.2 No.107.3-05 EN/IEC 62040-1-1 EN/IEC 62040-2 EN/IEC 62040-3 OSHDP UL 1778 UL 60950-1
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Environmental

Ambient Air Temperature for Operation	32...104 °F (0...40 °C)
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Relative Humidity	0...95 %
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Operating altitude	0...3333 ft
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Ambient Air Temperature for Storage	5...104 °F (-15...40 °C)
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Storage Relative Humidity	0...95 %
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Storage altitude	0...50000 ft (0.00...15240.00 m)
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Acoustic level	54 dBA
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Online Thermal Dissipation	61893 Btu/h
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NEMA degree of protection	NEMA 1
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IP degree of protection	IP20
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Communications & Management

Free slots	1
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Pre-Installed SmartSlot™ Cards	Network management card 2 with environmental monitoring, out of band access and Modbus
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Control panel	Touch Screen LCD User Interface
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Emergency Power Off (EPO)	Optional
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Packing Units

Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	84.65 in (215 cm)
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Package 1 Width	50.00 in (127 cm)
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Package 1 Length	279.53 in (710 cm)
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Package 1 Weight	19702.73 lb(US) (8937 kg)
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Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
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EU RoHS Directive	Under investigation
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Optimized Energy Efficiency	Energy efficient product
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Contractual warranty

Warranty	1 year on-site repair or replace with factory authorized Start-Up
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Recommended replacement(s)