

Product data sheet

Specifications



Symmetra PX 400kW Scalable to 500kW without Maintenance Bypass or Distribution-Parallel Capable

SY400K500D

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.
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Lead time	Usually Ships within 6 Weeks
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Main

Main Input Voltage	3 phase 3 phase
Other Input Voltage	415 V
Main Output Voltage	480 V 3 phase 400 V 3 phase
Other Output Voltage	415 V
Kw Rating	400000 W
Rated power in VA	400000 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

General

Bypass Voltage Tolerance	+/-10% settable from +/-4/6/8 and 10%
Number of power module free slots	4
Number of power module filled slots	16
Redundant	Yes

Physical

Color	Black
Height	78.39 in (199.1 cm)

Width	165.35 in (420 cm)
Depth	42.13 in (107 cm)
Net Weight	15055.38 lb(US) (6829 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	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% for 0 to 100% linear load and < 6% for full non-linear load
Overload Operation	10 minutes @ 125% and 30 seconds @ 150%
Bypass type	Built-in Static Bypass 96 % in battery operation)
Maximum configurable power in VA	500000 VA
Transfer Time	2ms typical

Conformance

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

Environmental

Ambient air temperature for operation	32...104 °F (0...40 °C)
Relative Humidity	0...95 %
Operating altitude	0...3333 ft

Ambient Air Temperature for Storage	5...104 °F (-15...40 °C)
Storage Relative Humidity	0...95 %
Storage altitude	0...50000 ft (0.00...15240.00 m)
Acoustic level	54 dBA
Heat dissipation	49515 Btu/h
NEMA degree of protection	NEMA 1
IP degree of protection	IP20

Batteries & Runtime

Included Battery Modules	26
Battery Slots Empty	36
Typical recharge time	3.5 h
RBC Quantity	6
	10 minutes @ 125% and 60 seconds @ 150%
Battery Charge Power (Watts)	38400 W rated
Battery design life	5...8 year(s)
Battery power in VAH	134784 VAh runtime
Battery option	SYBT9-B6 4 165888 VAh SYBFXR8-8 1 207360 VAh SYBFXR8-8 2 248832 VAh SYBFXR8-8 4 331776 VAh SYBFXR8-8 3 290304 VAh
Extendable Run Time	1

Communications & Management

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

Ordering and shipping details

Package 1 Weight	16519.25 lb(US) (7493 kg)
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Packing Units

Package 1 Height	84.65 in (215 cm)
Package 1 Width	279.53 in (710 cm)
Package 1 Length	50.00 in (127 cm)

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
EU RoHS Directive	Not compliant
Optimized Energy Efficiency	Energy efficient product

Contractual warranty

Warranty	1 year on-site repair or replace with factory authorized Start-Up
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