

SY125K500D

Symmetra PX 125kW Scalable to 500kW without
Maintenance Bypass & Distribution-Parallel
Capable



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

General

Provided equipment	Assembly service Installation guide Network management card Start-up service User manual
Product web sub-family	Symmetra PX 250/500kW
Bypass voltage tolerance	+/- 10 % settable from +/- 4/6/8 and 10 %
Performance multiplier	0.350208
Number of tare power	940 W
Number of power module free slots	15
Number of power module filled slots	5
Redundant	Yes
Size UPS version	Internetworking Server Telecom
UPS size	L
Value multiplier	0.81

Physical

Colour	Black
Depth	107 cm
Height	199.1 cm
Mounting preference	No preference

Net weight	2734 kg
Mounting mode	Not rack-mountable
Two post mountable	0
USB compatible	No
Width	255 cm

Input

Network frequency	40...70 Hz auto-sensing
Number of input connectors	1 hard wire 4-wire (3P + E) 1 hard wire 5-wire (3P + N + E)
Input voltage limits	340...460 V 400 V 408...552 V 480 V
Inputvolt_other	415 V
Max short time withstand current	50 kA
Input harmonic distortion	Less than 5 % for full load
Input protection type	3-pole circuit breaker
Input voltage	480 V 3 phases 400 V 3 phases
Load power factor	0.5 leading to 0.5 lagging
Cos phi	0.99

Output

Rated power in W	125000 W
Maximum configurable power in W	500000 W
Harmonic distortion	Less than 2 %
Output frequency	50 Hz sync to mains 60 Hz +/- 0.1 % for 60 Hz nominal unsynchronised 50 Hz +/- 0.1 % for 50 Hz nominal unsynchronised 60 Hz sync to mains
Outputvolt_other	415 V
UPS type	Double conversion online
Wave type	Sine wave
Output connector type	Hard wire 4-wire (3P + E) 1 Hard wire 5-wire (3P + N + E) 1
Output voltage tolerance	+/- 1% static and +/- 5% at 100% load step
Output harmonic distortion	< 2% linear load and < 3% non-linear load
Output overload operation	10 minutes at 125% and 60 seconds at 150%
Bypass type	Built-in static bypass
Curve equation	Efficiency
Curve fixed loss	0.0082
Curve load maximum	100 %
Curve load minimum	1 %
Curve proportional loss	0.0156
Curve square loss	0.0162
Curve X-axis maximum	100 %
Curve test cond ID	Curve fit of data measured in accordance with the ENERGY STAR Test Method for Uninterruptible Power Supplies. All measurements taken in normal mode(s), at typical environmental conditions, with 480V/60Hz electrical input and balanced resistive load (PF = 1.0) output.
Curve X-axis minimum	0 %
Curve X-axis title	Load
Curve X-axis units	Percentage
Curve Y-axis maximum	100 %
Curve Y-axis minimum	50 %
Curve Y-axis title	Efficiency
Curve Y-axis units	Percentage

Efficiency	96 % (in battery operation)
Graph display	1
Output voltage	480 V 3 phases 400 V 3 phases
Maximum configurable power in VA	500000 VA
Rated power in VA	125000 VA
Transfer time	2 ms typical

Conformance

Product certifications	CUL listed EUROBAT UL listed
Standards	CSA C22.2 No 107.3-05 EN/IEC 62040-1-1 EN/IEC 62040-2 EN/IEC 62040-3 OSH PD UL 1778 UL 60950-1

Environmental

Ambient air temperature for operation	0...40 °C
Relative humidity	0...95 %
Operating altitude	0...3333 ft
Ambient air temperature for storage	-15...40 °C
Storage Relative Humidity	0...95 %
Storage altitude	0.00...15240.00 m
Acoustic level	54 dBA
Heat dissipation	19427 Btu/h
Show note OP temperature	No
NEMA degree of protection	NEMA 1
IP degree of protection	IP20

Batteries & Runtime

Battery type	VRLA
Number of battery filled slots	8
Number of battery free slots	0
Battery recharge time	3.5 h
Number of battery replacement quantity	6
Liquid value	0
Battery overload operation	10 minutes at 125% and 60 seconds at 150%
Battery curve	P
Battery charger power	11815 W rated
Battery design life	5...8 year(s)
Battery power in VAh	41472 VAh runtime
Battery option	SYBFXR8-8 1 82944 VAh SYBFXR8-8 3 165888 VAh SYBFXR8-8 5 248832 VAh SYBFXR8-8 7 331776 VAh SYBFXR8-8 2 124416 VAh SYBFXR8-8 4 207360 VAh SYBFXR8-8 6 290304 VAh
Extended runtime	1

Communications & Management

Free slots	1
Preinstalled device	Network management card 2 with environmental monitoring, out of band access and Modbus
Control panel	Touch screen LCD user interface
Emergency power off	Optional

Packing Units

Package 1 Weight	3036 kg
Package 1 Height	215 cm
Package 1 width	299 cm
Package 1 Length	127 cm

Offer Sustainability

REACH free of SVHC	Yes
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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