

# Product data sheet

Specifications



## Symmetra PX 500kW Scalable to 500kW with Right Mounted Maintenance Bypass and Distribution

SY500K500DR-PD

### 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.

**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  
SYBFXR8-8 2 248832 VAh  
SYBFXR8-8 3 290304 VAh  
SYBFXR8-8 4 331776 VAh

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Extendable Run Time	1
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## General

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Bypass Voltage Tolerance	+/-10% settable from +/-4/6/8 and 10%
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Number of power module free slots	0
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Number of power module filled slots	20
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Redundant	Yes
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## Physical

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Color	Black
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Height	78.39 in (199.1 cm)
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Width	204.72 in (520 cm)
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Depth	42.13 in (107 cm)
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Product Weight	18785.60 lb(US) (8521 kg)
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USB compatible	No
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## Input

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Input Frequency	40 - 70 Hz auto-sensing
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Number of input connectors	1 Hard Wire 4-wire (3PH + G) 1 Hard Wire 5-wire (3PH + N + G)
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Efficiency at full load	340...460 V 400 V 408...552 V 480 V
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Maximum Short Circuit Withstand (Icw)	50 kA
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Input Total Harmonic Distortion	Less than 5% for full load
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Input protection type	3-pole breaker
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Load power factor	0.5 leading to 0.5 lagging
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Input Power Factor at Full Load	0.99
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## Output

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Max Configurable Power (Watts)	500000 W
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Harmonic distortion	Less than 2%
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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
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Topology	Double Conversion Online
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Waveform Type	Sine wave
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Output voltage tolerance	+/-1% static and +/- 5% at 100% load step
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Output Voltage THD	< 2% linear load and < 3% non-linear load  10 minutes @ 125% and 60 seconds @ 150%
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Bypass type	Built-in Maintenance Bypass Built-in Static Bypass  96 % in battery operation)
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Maximum configurable power in VA	500000 VA
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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	20533.87 lb(US) (9314 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
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EU RoHS Directive	Not compliant
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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)**