

# 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

**Kw Rating** 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

---

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	204.72 in (520 cm)
-------	--------------------

---

Depth	42.13 in (107 cm)
-------	-------------------

---

Net Weight	18785.60 lb(US) (8521 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 Maintenance Bypass Built-in Static Bypass  96 % in battery operation)
-------------	---

---

Maximum configurable power in VA	500000 VA
----------------------------------	-----------

---

Transfer Time	2ms typical
---------------	-------------

## Conformance

<b>Product Certifications</b>	cUL Listed Eurobat General Purpose UL Listed
-------------------------------	--

<b>Standards</b>	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
------------------	---

## Environmental

<b>Ambient Air Temperature for Operation</b>	32...104 °F (0...40 °C)
--	-------------------------

<b>Relative Humidity</b>	0...95 %
--------------------------	----------

<b>Operating altitude</b>	0...3333 ft
---------------------------	-------------

<b>Ambient Air Temperature for Storage</b>	5...104 °F (-15...40 °C)
--	--------------------------

<b>Storage Relative Humidity</b>	0...95 %
----------------------------------	----------

<b>Storage altitude</b>	0...50000 ft (0.00...15240.00 m)
-------------------------	----------------------------------

<b>Acoustic level</b>	54 dBA
-----------------------	--------

<b>Heat dissipation</b>	61893 Btu/h
-------------------------	-------------

<b>NEMA degree of protection</b>	NEMA 1
----------------------------------	--------

<b>IP degree of protection</b>	IP20
--------------------------------	------

## Communications & Management

<b>Free slots</b>	1
-------------------	---

<b>Pre-Installed SmartSlot™ Cards</b>	Network management card 2 with environmental monitoring, out of band access and Modbus
---------------------------------------	--

<b>Control panel</b>	Touch Screen LCD User Interface
----------------------	---------------------------------

<b>Emergency Power Off (EPO)</b>	Optional
----------------------------------	----------

## Packing Units

<b>Unit Type of Package 1</b>	PCE
-------------------------------	-----

<b>Number of Units in Package 1</b>	1
-------------------------------------	---

<b>Package 1 Height</b>	84.65 in (215 cm)
-------------------------	-------------------

<b>Package 1 Width</b>	50.00 in (127 cm)
------------------------	-------------------

<b>Package 1 Length</b>	279.53 in (710 cm)
-------------------------	--------------------

<b>Package 1 Weight</b>	20533.87 lb(US) (9314 kg)
-------------------------	---------------------------

## Offer Sustainability

<b>California proposition 65</b>	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>
----------------------------------	---

<b>EU RoHS Directive</b>	Not compliant
--------------------------	---------------

<b>Optimized Energy Efficiency</b>	Energy efficient product
------------------------------------	--------------------------

## Contractual warranty

<b>Warranty</b>	1 year on-site repair or replace with factory authorized Start-Up
-----------------	---

**Recommended replacement(s)**