

# Product data sheet

Specifications



## Symmetra PX 100KW Scalable to 250KW Without Maintenance Bypass or Distribution-Parallel Capable

SY100K250D

### 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

|                              |  |
|------------------------------|--|
| <b>Main Input Voltage</b>    | 480 V 3 phase<br>400 V 3 phase   |
| <b>Other Input Voltage</b>   | 415 V  |
| <b>Main Output Voltage</b>   | 480 V 3 phase<br>400 V 3 phase   |
| <b>Other Output Voltage</b>  | 415 V  |
| <b>Kw Rating</b>             | 100000 W   |
| <b>Rated power in VA</b>     | 100000 VA  |
| <b>Output connector type</b> | Hard Wire 4-wire (3PH + G) 1<br>Hard Wire 5-wire (3PH + N + G) 1               |
| <b>Battery Type</b>          | VRLA   |
| <b>Provided equipment</b>    | Assembly service<br>Network Management Card<br>Start-Up Service<br>User Manual |

### Batteries & Runtime

|                                     |   |
|-------------------------------------|---|
| <b>Included Battery Modules</b>     | 7                                       |
| <b>Battery Slots Empty</b>          | 1                                       |
| <b>Typical recharge time</b>        | 3 h                                     |
| <b>RBC Quantity</b>                 | 6                                       |
| <b>Battery Voltage</b>              | +/-288V                                 |
| <b>Overload Operation</b>           | 10 minutes @ 125% and 60 seconds @ 150% |
| <b>Battery Charge Power (Watts)</b> | 12056 W rated                           |
| <b>Battery design life</b>          | 5...8 year(s)                           |
| <b>Battery power in VAh</b>         | 36288 VAh runtime                       |
| <b>Battery option</b>               | SYBT9-B6 1 41472 VAh                    |

SYBFXR8-8 1 82944 VAh  
 SYBFXR8-8 3 165888 VAh  
 SYBFXR8-8 7 331776 VAh  
 SYBFXR8-8 2 124416 VAh  
 SYBFXR8-8 4 207360 VAh  
 SYBFXR8-8 5 248832 VAh  
 SYBFXR8-8 6 290304 VAh

Extendable Run Time 0

## General

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

Number of power module free slots 6

Number of power module filled slots 4

Redundant Yes

## Physical

Height 78.39 in (199.1 cm)

Width 92.52 in (235 cm)

Depth 42.13 in (107 cm)

Net Weight 4997.88 lb(US) (2267 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) 250000 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  
96.5 % in battery operation)

|   |           |
|---|-----------|
| <b>Maximum configurable power in VA</b> | 500000 VA |
|---|-----------|

|                      |             |
|----------------------|-------------|
| <b>Transfer Time</b> | 2ms typical |
|----------------------|-------------|

## Conformance

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

|                  |   |
|------------------|---|
| <b>Standards</b> | CSA C22.2 No.107.3-05<br>EN 50091-1<br>EN/IEC 62040-1-1<br>EN/IEC 62040-3<br>FCC Part 15 class A<br>OSHDP<br>VFI-SS-111 |
|------------------|---|

## 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> | 12378 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> | 117.72 in (299 cm) |
|-------------------------|--------------------|

|                         |                          |
|-------------------------|--------------------------|
| <b>Package 1 Weight</b> | 5549.04 lb(US) (2517 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 |
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## Contractual warranty

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Warranty

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

Recommended replacement(s)