

# Symmetra PX 20

Scalable to 20 kW

## Modular, scalable, high-efficiency power protection for data centers

The Symmetra™ PX 20 kW is a world-class, high-efficiency power protection system designed to cost-effectively provide redundancy and high levels of availability. Its single-rack footprint seamlessly integrates power protection and power distribution into today's state-of-the-art data center designs. Made up of swappable power, battery, bypass, and intelligence modules, this architecture can scale power and runtime in increments of 10 kW up to 20 kW N+1 as demand grows or when higher levels of availability are required in your data center.



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Life Is On

**Schneider**  
Electric

# Symmetra PX 20

## Features and benefits

### Features and benefits

The Symmetra PX family serves as the core power train that drives Schneider Electric InfraStruxure™ systems for small, medium, and large data centers. Self-diagnostic capabilities enhance the manageability of the Symmetra PX 20 kW and increase overall data center reliability. Standardized, factory-assembled modules mitigate the risk of human error during installation or routine maintenance procedures. If a module requires replacement, a mean time to repair (MTTR) of less than 10 minutes enhances availability. The all-in-one Symmetra PX 20 kW fits seamlessly onto the data center floor or in the back room, delivering the high availability, extreme agility, and low total cost of ownership (TCO) you have come to expect from the Symmetra PX family.

High-performance, right-sized, modular, scalable, three-phase power protection with ultra-high availability and efficiency for small data centers.

- Power protection, battery backup runtime, and configurable power distribution in a single rack
- Fault-tolerant (N+1) design for the highest level of availability
- Unity power factor corrected (kVA = kW )
- Swappable power and battery modules for quick expansion and reduced MTTR
- Factory-assembled, configurable power distribution panel reduces installation time
- Space-saving and aesthetic one-rack design

## Symmetra PX 20

### Availability

- Swappable power, battery, intelligence modules, and static bypass switch
- Configurable for N+0 or N+1 redundancy
- Toolless module replacement
- Self-diagnosing, field-replaceable modules
- Redundant intelligence module
- Configurable power distribution panel

### Scalability

- Adaptable 10 kW to 20 kW power capacity
- N+0 or N+1 redundancy up to 20 kW N+1
- Scalable 10 kW power modules
- Extended battery runtime available

### Manageability

- Dual-mains input, top or bottom feed
- Embedded network management
- Remote access over HTTP, HTTPS, Telnet, SSH, SNMP
- Local access at PowerView™ display interface
- Configurable alarm notifications

### Total cost of ownership

- Unity power factor corrected
- Up to 95 percent efficient
- Integrated monitoring of battery modules
- Start-up service and one-year warranty included

# Symmetra PX 20

## Symmetra PX 20 features

- 1. 39-pole configurable power distribution unit (PDU)**  
Highly customizable, factory-tested power distribution solution fits the needs of any data center — within the single-rack footprint of the UPS.
- 2. Main intelligence module and redundant intelligence module**  
Backup for the swappable main intelligence module guarantees the maximum possible availability for your system.
- 3. Swappable 10 kW high-efficiency power module**  
High-efficiency power modules reduce power and cooling costs, saving you money while delivering the optimal power protection your data center deserves.
- 4. Fully rated inverter**  
In the power modules, improve return on investment by providing more real power, as output power equals input power (kW = kVA).
- 5. LCD display interface**  
Offers a clear, text-based overview of alarms, status data, and system configuration options in a central location.
- 6. Scalable battery module**  
Connected in parallel for increased availability, these swappable battery modules feature advanced battery monitoring and temperature-compensated battery charging that extends battery life. Swappability lowers the cost of replacement and MTTR. Up to four battery frames can be installed for longer runtimes.
- 7. Network management card**  
Provides UPS status and event notification to simplify UPS and PDU management. Includes two SmartSlot positions.
- 8. Static bypass switch module**  
A swappable static bypass switch transfers the load to utility power without interruption in case of heavy overload or faulty conditions and ensures that, even in 125 percent overload conditions, the data center remains operational.
- 9. Maintenance bypass panel**  
Maintenance bypass is included in this all-in-one UPS.
- 10. Advanced battery management**  
With advanced monitoring capabilities, the Symmetra PX 20 kW UPS detects failing battery units before they become a problem — no add-on battery management system necessary. Each battery unit in the battery module records its performance and monitors its temperature, reporting this data to the UPS. The Symmetra PX 20 also continually calculates the battery charge percentage and discharge characteristics. During utility power failure or battery self-test, the UPS performs battery diagnostics on each battery unit and generates an alarm if significant performance deviations are detected.

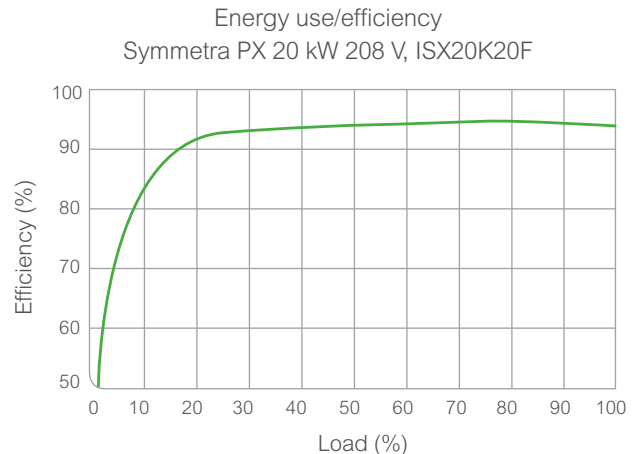


# Symmetra PX 20

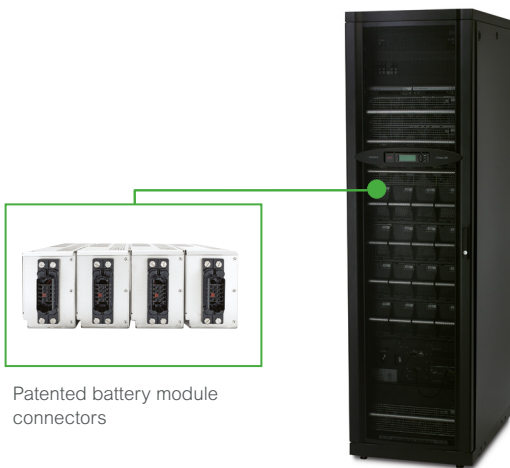
## Symmetra PX 20 features (continued)

### Energy efficiency

The Symmetra PX 20 kW efficiency curve is nearly flat down to 25 percent load, saving power and cooling costs and significantly reducing your overall TCO.



Curve fit to measured efficiency data. All measurements taken in normal operating mode, at typical environmental conditions, with nominal electrical input and balanced resistive load (PF = 1.0) output.



Patented battery module connectors

### Modular batteries

Modular batteries can be added or replaced quickly and easily.

- Simply slide the battery module into place. All DC connections are preconfigured and insulated — no cable installation or contact with DC terminals required.
- Patented rear connectors enable toolless connection and disconnection.

Parallel strings increase availability.

- One row of modules makes one string. All battery modules support the load, so no individual battery is a single point of failure.

Now, even batteries look great in the data center.

- No messy-looking cables — battery connections are made inside the battery unit case.
- Fully integrated system housed in a standard IT rack form factor.

Batteries are monitored at the individual module level.

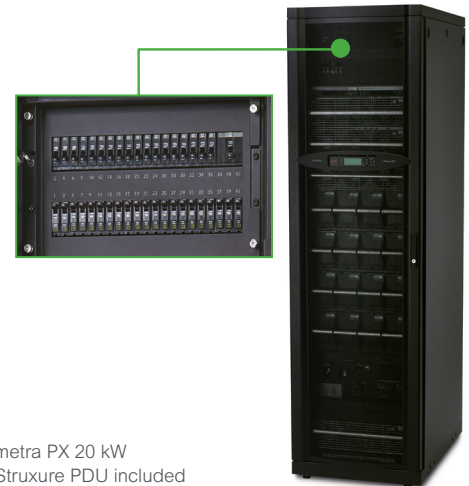
- Each individual module monitors current, voltage, and temperature and reports the information to the UPS.
- No time wasted — the online battery chart helps you quickly identify and replace faulty modules.
- See the battery data that interests you — alarm notifications are user-configurable

# Symmetra PX 20

## Configured-to-order distribution

### InfraStruxure power distribution unit included

Symmetra PX 20 includes a configured-to-order, factory-assembled, 39-pole InfraStruxure PDU tailored to your site requirements. Customized breaker and cord sets also reduce cable clutter — your site's layout defines the length of cord connector sets. With extensive configuration options, the Symmetra PX 20 delivers the flexibility and management that data centers require while answering the needs of today's businesses with quick installation and rapid start-up time.



Symmetra PX 20 kW  
InfraStruxure PDU included  
in Symmetra PX 20 kW  
all-in-one UPS

### Distribution options

#### Configurable power accessories

Configurable power distribution accessories deliver the flexibility and management that data centers require. A comprehensive selection of single- and three-phase whips, breakers, connector sets, and current monitoring accessories provide agility, availability, and management in the data center.

#### Breakers

Square D™ by Schneider Electric bolt-on breakers are shipped preinstalled and match your site specifications.

##### Options:

- 1-pole: 15 A, 20 A, 30 A
- 2-pole: 15 A, 20 A, 30 A
- 3-pole: 20 A, 30 A, 50 A, 60 A

#### Breakers

Connectors are shipped preinstalled.

##### Options:

- |          |         |                   |
|----------|---------|-------------------|
| • L21-20 | • L5-15 | • L6-30           |
| • L21-30 | • L5-20 | • Hubbell CS8354C |
| • L15-30 | • L5-30 | • 60 A IEC 309    |
| • L14-20 | • L6-15 |                   |
| • L14-30 | • L6-20 |                   |

# Symmetra PX 20

## Accessories



### Extended runtime frames

To increase the number of minutes your load can remain on battery, add optional battery extended runtime frames. A maximum of four battery frames can be connected to the Symmetra PX 20 kW.

### Seismic kits



Seismic kit for Symmetra PX 20 batteries



Seismic kit for Symmetra PX 20 and 60 kVA InfraStruxure PDUs

### Management cards

Two SmartSlot positions can be used to expand the monitoring capabilities of the UPS with Schneider Electric network management cards.

# Visibility and peace of mind

## EcoStruxure IT enables resilient, secure, and sustainable data centers and IT environments

Schneider Electric's comprehensive Data Center Infrastructure Management (DCIM) solution, EcoStruxure IT, ensures business continuity by enabling secure monitoring, management, insights, planning, and modeling — whether from a single IT rack to hyper-scale IT — on-premises, in the cloud, and at the edge.



Resilient



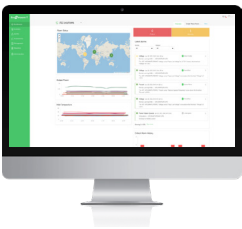
Secure



Sustainable

### Easy visibility

Monitoring and management software streamlines data center device management:



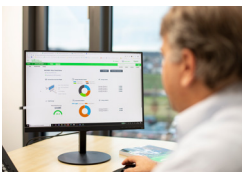
**EcoStruxure IT Expert** provides you a hands-on approach with **cloud-based** monitoring software that synthesizes and analyzes performance and alert data into proactive recommendations and enables wherever-you-go visibility from any device. Try it now: [www.ecostruxureit.com/ecostruxure-it-expert/#trial](http://www.ecostruxureit.com/ecostruxure-it-expert/#trial)



**EcoStruxure Data Center Expert** is a scalable end-to-end **on-premise** monitoring software that collects, organizes, and distributes critical device information, providing a comprehensive view of your company-wide, multi-vendor physical infrastructure.

### 24/7 peace of mind

Digital services proactively monitor your critical devices:

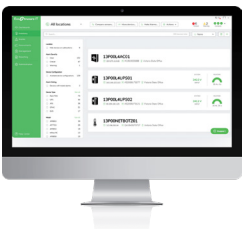


**EcoStruxure Asset Advisor\*** for secure power and cooling provides you a hands-off approach with 24/7 remote monitoring service by the Schneider Electric Connected Services Hub experts.

We monitor and troubleshoot, you relax.

### Operations, optimized

Planning and modeling software transforms data into performance insights:



**EcoStruxure IT Advisor** is a data center infrastructure planning and modeling solution that provides Data Center Managers in large enterprises and colocation data centers with full insights into their infrastructure to improve profitability, sustainability, and resiliency.

\* Contact your local representative for availability.

### Comprehensive on-site services

#### Start-up service: included with UPS

- Commission the installation in accordance with manufacturer's recommendations. Ensure optimal system performance from Day 1

#### Schneider Electric-certified installation services

- Expert configuration of your equipment for optimal performance and reliability

#### Maintenance services

- Ensure proper care of your mission-critical applications
- Preventive maintenance and response time upgrades, where available

#### Flexible service plans/ on-site extended warranty

- Hassle-free system maintenance
- Improve uptime at a predictable cost

## Technical specifications

UPS rating kVA/KW (PF=1)		Symmetra PX 20 kW all-in-one
<b>Mains input (Normal operation)</b>		
Grid system	Three phases + neutral + ground	
Voltage range (full load)	177 V – 240 V	
Frequency range	50/60 Hz +/-3 Hz (auto sensing)	
Power factor (PF)	0.99%	
I thd (full load)	< 6%	
Nominal input current	61.3 A	
Maximum input current (Nominal Vin, 10% charging batteries)	70.9 A	
Input current limit	89.4 A	
<b>Bypass input (bypass operation)</b>		
Grid system	Three phases + neutral + ground	
V nominal	208 V	
V range	183 V – 233 V	
Frequency (nominal)	60 Hz	
Frequency (range)	40 Hz – 70 Hz	
Overload output current	69.4 A @ 125% (continuous)	
<b>Output</b>		
Power rating	20 kVA/20 kW	
Grid system	Three phases + neutral + ground	
V nominal	208 V	
Nominal output current	55.5 A @ 100% continuous	
Frequency regulation	Optional +/-0.1 Hz and +/-10 Hz setting from front panel (synchronized to mains > 57 to 63 Hz)	
Synchronized slew rate	1 Hz/s	
Overload (normal and battery operation)	83.3 A @ 150% for 30 seconds	
V thd	< 2% @ 100% resistive load, < 6% computer load as defined by EN 50091-3/IEC 62040-3	
Load PF	0.5 to 1.0	
<b>Efficiency</b>		
Normal operation	up to 95%	
<b>Mechanical</b>		
Maximum dimensions (HxWxD)	81.5 x 23.5 x 35.6 in. (2,068 x 597 x 905 mm)	
Maximum Weight	1,803 lb. (818 kg)	
Maximum shipping weight	665 lb. (301 kg)	
<b>UPS maximum capacity</b>		
10 kW power modules	3 (20 kW N+1)	
Battery modules	3 (20 kW N+1)	
Breakers	39 available breaker positions	
<b>Regulatory compliance</b>		
UL 1778, CSA, FCC Part 15 Class A, IEC 61000-3-2, IEC 61000-3-3		

Preliminary — subject to change without notice.

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