

# Symmetra 230 V

4-16 kVA N + 1 Redundant rack/tower convertible 13U-19U,  
4-16 kVA N + 1 Redundant extended run tower

Highly available, redundant, and scalable double-conversion on-line power protection



## The first UPS with redundancy and scalability within a single chassis

Symmetra™ 230 V uses a modular, redundant architecture that can scale power and runtime as demand increases or when higher levels of availability are required.

- Configurable for N+1 internal redundancy
- Scalable power capacity
- Manageable external batteries
- Network manageable
- LCD display
- Modular design
- Automatic internal bypass
- Frequency and voltage regulation

# Features and benefits

## Symmetra 230 V

### Battery systems

Additional battery modules or external battery frames can be added to achieve desired levels of runtime. Symmetra LX battery modules and frames are hot-swappable so you never have to bring down your mission critical loads to service the unit.

SYBT5 Battery module for APC Symmetra LX

SYARMXR3B3I, SYARMXR9B9I, SYAXR9B9I  
Symmetra LX Extended Run Battery Frames



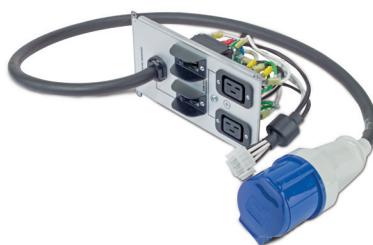
### Power distribution

Field replaceable receptacle panels allow direct connection enabling fast installation of new IT equipment.

SYPD10 230 V backplate kit with (2) IEC320 C19 and (1) IEC 60309

SYPD4 220-240 V backplate kit with (8) IEC320 C13 and (2) IEC320 C19

SYPD8 230 V backplate kit with (4) IEC 320 C19



### Service bypass

Service bypass panels featuring quick transfer time and wraparound service bypass.

SBP20KP: APC Service bypass panel  
200/208/230/240 V 125A  
Hard-wire input/output

SBP16KRM14U: 230 V; 100A; MBB;  
Hard-wire input; (3) 30A Hard-wire output



### Services

Services to extend the coverage beyond the original factory warranty or on-site to diagnose or repair your APC equipment.

WBEXTWAR1YR-SP-06  
1 Year extended warranty

WBEXTWAR3YR-SP-06  
3 Year extended warranty

WADVPLN1P-SY-06  
1 Year next business day 1P  
advantage plan for Symmetra

WUPGONSITEFW-SY-00  
Next business day on-site service  
upgrade to factory warranty

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- 1 Robust frame** - Provides “slots” for modules to connect to communication and DC back planes. No intelligence or active components for highest reliability
- 2 Power module** - Provides flexibility to scale power, adds N+1 capability and is hot-swappable for easy, risk-free maintenance
- 3 Battery module** - Scalable for more runtime, hot-swappable for easy, risk-free replacement, N+1 redundant
- 4 Intelligence modules** - Redundant intelligence modules that are hot-swappable for easy risk-free maintenance
- 5 Single detachable front panel** - Quick access to modules for easy maintenance
- 6 LCD display** - Local user interface, easy to read and navigate through menus and functions
- 7 UPS network management card with environmental monitoring** - Provides remote user interface, manage via web browser, SNMP, and Telnet. Includes graceful unattended shutdown
- 8 Removable input/output wiring tray** - Allows easy hard-wiring at install and fast maintenance
- 9 Extended run connector** - Allows hot-install of Symmetra LX Extended Run Frames for quick, easy response to changing runtime needs
- 10 Extended run communication card** - Allows intelligence modules to monitor the health of external batteries
- 11 Field-replaceable power distribution panels** - Enable quick in-field modification of output receptacles to fit changing needs. Tower models ship with no receptacles, rack-mount models ship with receptacles appropriate for different voltage needs

## Runtime estimates

| UPS VA    | 3,000 W | 4,000 W | 5,000 W | 6,000 W | 7,000 W | 8,000 W | 9,000 W | 10,000 W | 11,000 W | Full load | Half load |
|-----------|---------|---------|---------|---------|---------|---------|---------|----------|----------|-----------|-----------|
| 4,000 VA  | :07     |         |         |         |         |         |         |          |          | :06       | :17       |
| 8,000 VA  | :18     | :13     | :09     | :07     |         |         |         |          |          | :06       | :17       |
| 12,000 VA | :30     | :21     | :16     | :13     | :10     | :08     | :07     |          |          | :06       | :17       |
| 16,000 VA | :42     | :30     | :23     | :19     | :15     | :13     | :11     | :09      | :08      | :06       | :17       |

For more runtime options visit [www.apc.com](http://www.apc.com)

## Technical specifications

| Symmetra 4-16 kVA rack and tower units          |                                                                                                                                                                                                                       |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output                                          |                                                                                                                                                                                                                       |
| Nominal output voltage                          | 230 Vac                                                                                                                                                                                                               |
| Efficiency at full load                         | 90%                                                                                                                                                                                                                   |
| Output frequency (sync to mains)                | 47-63 Hz                                                                                                                                                                                                              |
| Waveform type                                   | Sine wave                                                                                                                                                                                                             |
| Output power capacity                           | 2,800-11,200 W                                                                                                                                                                                                        |
| Output connections                              | Tower - (1) Hard-wire 3-wire (H N + G),<br>16 kVA Rack frame - (1) Hard-wire 3-wire (H N + G), (8) IEC 320 C13 (10) IEC 320 C19,<br>8 kVA Rack frame - (1) Hard-wire 3-wire (H N + G), (8) IEC 320C13 (6) IEC 320 C19 |
| Input                                           |                                                                                                                                                                                                                       |
| Nominal input voltage                           | 230 VAC 1PH, 400 VAC 3PH                                                                                                                                                                                              |
| Input frequency                                 | 45 - 65 Hz (auto sensing)                                                                                                                                                                                             |
| Input connections                               | Hard-wire 3 wire (1PH+N+G), Hard-wire 5-wire (3PH + N + G)                                                                                                                                                            |
| Bypass                                          | Internal bypass (automatic and manual), Optional external bypass                                                                                                                                                      |
| Battery                                         |                                                                                                                                                                                                                       |
| Battery type                                    | Maintenance-free sealed lead-acid battery with suspended electrolyte: leakproof                                                                                                                                       |
| Battery module                                  | SYBT5                                                                                                                                                                                                                 |
| Runtime                                         | Runtimes vary with load, visit <a href="http://www.apc.com">www.apc.com</a> for specifics                                                                                                                             |
| Communications and management                   |                                                                                                                                                                                                                       |
| Interface port(s)                               | DB-9 RS-232, SmartSlot                                                                                                                                                                                                |
| Pre-Installed SmartSlot™ cards                  | AP9631                                                                                                                                                                                                                |
| Emergency power off (EPO)                       | Yes                                                                                                                                                                                                                   |
| Control panel                                   | Multifunction LCD status and control console                                                                                                                                                                          |
| Physical                                        |                                                                                                                                                                                                                       |
| Maximum height                                  | 16 kVA frame – Rack: 19U, Tower: 937 mm, Tower XR: 1516 mm<br>8kVA frame - Rack: 13U, Tower: 671 mm                                                                                                                   |
| Maximum width                                   | Rack: 472 mm, Tower: 483 mm                                                                                                                                                                                           |
| Maximum depth                                   | 738 mm (Rack: 688 mm behind the front mounting rail)                                                                                                                                                                  |
| Maximum weight (without redundant power module) | 16 kVA frame – Rack: 287 kg, Tower: 308 kg, Tower XR: 504 kg,<br>8kVA Frame - Rack: 178 kg, Tower: 202 kg                                                                                                             |

For detailed specifications by model visit [www.apc.com](http://www.apc.com)