# **Features & Benefits**

## **Availability**

#### N+1 REDUNDANCY:

The ability to add another power module provides N+1 redundancy and increases the availability of the solution

#### **EXTENDABLE RUN TIME:**

Additional batteries can be added to provide power to the load for an extended period of time in the event of utility supply failure.

#### **BUILT-IN STATIC BYPASS SWITCH:**

The built-in static bypass switch enables the UPS to transfer the load to utility power, without interruption, in case of heavy overload or faulty conditions.

#### **Economy**

# FULL-RATED POWER WITH KVA EQUALING KW:

The full rated inverter of the Symmetra PX is a perfect match for today's power factor corrected computer loads, eliminating the need for an oversized UPS

## TEMPERATURE COMPENSATED BATTERY CHARGING:

Temperature Compensated Battery Charging provides prolonged battery life by regulating the charge voltage according to actual battery temperature.

## SCALABLE POWER CAPACITY:

The modular design of the Symmetra PX allows the user to add power modules as required. Thus the user will be able to deploy UPS protection in a "pay as you grow" approach.

## Serviceability

#### **AUTOMATIC SELF TEST:**

The product automatically performs a self-test every two weeks. This ensures you will be alerted to degraded batteries before they wear out. Through software, or the push of a button, you may perform self-tests anytime.

## **HOT SWAP BATTERIES:**

The modular battery design provides ease of maintenance and reduces Mean Time To Repair. A service engineer or trained user can easily swap a battery module in a matter of minutes while the UPS remains on-line.

# MODULAR-LEVEL REPAIR:

The modular fault-tolerant design ensures system availability, until service can be performed, and reduces the risk of human errors.

## FRONT-ACCESS SERVICING:

The front-access feature makes installation and maintenance easy and minimizes space requirements.

# Manageability

#### **BUILT-IN WEB/SNMP MANAGEMENT:**

Provides full UPS management via multiple open standards like Telnet, HTTP, SNMP and pager notifications. It is a full-featured, robust power management product that is certified for and integrates with all other APC management products.

## **INTELLIGENT BATTERY MANAGEMENT:**

The Symmetra PX features advanced battery monitoring and temperature-compensated battery charging. Battery data is continuously compared to preprogrammed data in the monitoring software to ensure reliable batteries. A reduction in battery capacity automatically triggers an alarm.

### MULTIPLE SYSTEM SHUTDOWN:

Provides graceful, unattended shutdown for the connected servers should an extended power outage occur.

# **SMART SLOT:**

By adding APC accessory cards into the SmartSlot you can monitor power conditions and take actions accordingly. The addition of the accessory cards increases overall system availability by proactively notifying you of conditions that could affect uptime (accessories sold seperately).

# Symmetra® PX 80kW

Scalable, redundant power protection for centralized IT equipment in medium to large data centers



Symmetra PX, three-phase input / three-phase output (3:3), is a single unit, composed of modular components. This modular architecture provides the foundation of building and scaling near-continuous availability power systems with a flexible range of power capacity. The Symmetra PX packages the high availability requirements of easy power and runtime scalability into a very small footprint. Combined with the complete line of APC data center protection software and accessories it provides the four most critical elements of total data center protection.



Technical Specifications	SY10K80F	SY20K80F	SY30K80F	SY40K80F	SY50K80F	SY60K80F	SY70K80F	SY80K80F
COMMUNICATION								
Interface port	RJ-45 10	Contact Closure, RJ-45 10 Base-T ethernet for web/ SNMP/ Telnet management, Smart-Slot	RJ-45 10	RJ-45 10	Contact Closure, RJ-45 10 Base-T ethernet for web/ SNMP/ Telnet management, Smart-Slot	Contact Closure, RJ-45 10 Base-T ethernet for web/ SNMP/ Telnet management, Smart-Slot	Contact Closure, RJ-45 10 Base-T ethernet for web/ SNMP/ Telnet management, Smart-Slot	RJ-45 10
Emergency Power Off (EPO)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
OUTPUT								
Output power capacity	10,000 VA	20,000 VA	30,000 VA	40,000 VA	50,000 VA	60,000 VA	70,000 VA	80,000 VA
Output power capacity	10,000 Watts	20,000 Watts	30,000 Watts	40,000 Watts	50,000 Watts	60,000 Watts	70,000 Watts	80,000 Watts
Max Configurable Power	80,000 VA	80,000 VA	80,000 VA	80,000 VA	80,000 VA	80,000 VA	80,000 VA	80,000 VA
Max Configurable Power	80,000 Watts	80,000 Watts	80,000 Watts	80,000 Watts	80,000 Watts	80,000 Watts	80,000 Watts	80,000 Watts
Nominal output voltage	208 (3PH) VA	208 (3PH) VA	208 (3PH) VA	208 (3PH) VA	208 (3PH) VA	208 (3PH) VA	208 (3PH) VA	208 (3PH) VA
Waveform type	Sinewave	Sinewave	Sinewave	Sinewave	Sinewave	Sinewave	Sinewave	Sinewave
Output Connections	(1)Hard Wire 5-wire (3PH + N + G), (1)Screw Terminals	(1)Hard Wire 5-wire (3PH + N + G), (1)Screw Terminals	(1)Hard Wire 5-wire (3PH + N + G), (1)Screw Terminals	(1)Hard Wire 5-wire (3PH + N + G), (1)Screw Terminals	(1)Hard Wire 5-wire (3PH + N + G), (1)Screw Terminals	(1)Hard Wire 5-wire (3PH + N + G), (1)Screw Terminals	(1)Hard Wire 5-wire (3PH + N + G), (1)Screw Terminals	(1)Hard Wire 5-wire (3PH + N + G), (1)Screw Terminals
INPUT								
Efficiency at full load		_	_	_	_	_	_	_
Bypass	Built-in Static Bypass	Built-in Static Bypass	Built-in Static Bypass	Built-in Static Bypass	Built-in Static Bypass	Built-in Static Bypass	Built-in Static Bypass	Built-in Static Bypass
Output Voltage Distortion	less than 3%	less than 3%	less than 3%	less than 3%	less than 3%	less than 3%	less than 3%	less than 3%
Output Frequency (sync to mains)	57-63Hz for 60Hz nominal	57-63Hz for 60Hz nominal	57-63Hz for 60Hz nominal	57-63Hz for 60Hz nominal	57-63Hz for 60Hz nominal	57-63Hz for 60Hz nominal	57-63Hz for 60Hz nominal	57-63Hz for 60Hz nominal
Crest Factor	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Nominal input voltage	208 (3PH) V	208 (3PH) V	208 (3PH) V	208 (3PH) V	208 (3PH) V	208 (3PH) V	208 (3PH) V	208 (3PH) V
Input frequency	50/60 Hz +/- 5 Hz (auto sensing)	50/60 Hz +/- 5 Hz (manual switch)	50/60 Hz +/- 5 Hz (auto sensing)	50/60 Hz +/- 5 Hz (auto sensing)	50/60 Hz +/- 5 Hz (auto sensing), 60 Hz +/- 5 Hz	50/60 Hz +/- 5 Hz (auto sensing)	50/60 Hz +/- 5 Hz (auto sensing)	50/60 Hz +/- 5 Hz (auto sensing)
Input Connection Type	Hard Wire 5-wire (3PH + N + G)	Hard Wire 5-wire (3PH + N + G)	Hard Wire 5-wire (3PH + N + G)	Hard Wire 5-wire (3PH + N + G)	Hard Wire 5-wire (3PH + N + G)	Hard Wire 5-wire (3PH + N + G)	Hard Wire 5-wire (3PH + N + G)	Hard Wire 5-wire (3PH + N + G)
BATTERY								
Battery type	No internal battery : uses external battery system	No internal battery : uses external battery system	No internal battery : uses external battery system	No internal battery : uses external battery system	No internal battery : uses external battery system	No internal battery : uses external battery system	No internal battery : uses external battery system	No internal battery : uses external battery system
Typical recharge time	_	_	_	_	_	_	_	_
PHYSICAL								
Maximum height dimensions	82.00 inches	82.00 inches	82.00 inches	82.00 inches	82.00 inches	82.00 inches	82.00 inches	82.00 inches
Maximum width dimensions	48.00 inches	48.00 inches	48.00 inches	48.00 inches	48.00 inches	48.00 inches	48.00 inches	48.00 inches
Maximum depth dimensions	34.00 inches	34.00 inches	34.00 inches	34.00 inches	34.00 inches	34.00 inches	34.00 inches	34.00 inches
Net weight	1,457.00 lbs.	1,714.00 lbs.	1,971.00 lbs.	2,228.00 lbs.	2,485.00 lbs.	2,742.00 lbs.	2,999.00 lbs.	3,256.00 lbs.
Shipping Weight	1,582.00 lbs.	1,839.20 lbs.	2,096.60 lbs.	2,353.80 lbs.	2,611.00 lbs.	2,868.20 lbs.	3,125.40 lbs.	3,382.60 lbs.
Shipping Height	91.00 inches	91.00 inches	91.00 inches	91.00 inches	91.00 inches	91.00 inches	91.00 inches	91.00 inches
Shipping Width	59.00 inches	59.00 inches	59.00 inches	59.00 inches	59.00 inches	59.00 inches	59.00 inches	59.00 inches
Shipping Depth	41.50 inches	41.50 inches	41.50 inches	41.50 inches	41.50 inches	41.50 inches	41.50 inches	41.50 inches
ENVIRONMENTAL								
Operating Environment	0 - 40 &degC	0 - 40 &degC	0 - 40 &degC	0 - 40 &degC	0 - 40 &degC	0 - 40 &degC	-50 - 40 &degC	0 - 40 &degC
Operating Relative Humidity	0 - 95 %	0 - 95 %	0 - 95 %	0 - 95 %	0 - 95 %	0 - 95 %	0 - 95 %	0 - 95 %
Protection Class	NEMA 1	NEMA 1	NEMA 1	NEMA 1	NEMA 1	NEMA 1	NEMA 1	NEMA 1
CONFORMANCE								
Approvals	cUL Listed, CSA, FCC Part 15 Class A, ISO 14001, ISO 9001, UL 1778	cUL Listed, CSA, FCC Part 15 Class A, ISO 14001, ISO 9001, UL 1778	cUL Listed, CSA, FCC Part 15 Class A, ISO 14001, ISO 9001, UL 1778	cUL Listed, CSA, FCC Part 15 Class A, ISO 14001, ISO 9001, UL 1778	cUL Listed, CSA, FCC Part 15 Class A, ISO 14001, ISO 9001, UL 1778	cUL Listed, CSA, FCC Part 15 Class A, ISO 14001, ISO 9001, UL 1778	cUL Listed, CSA, FCC Part 15 Class A, ISO 14001, ISO 9001, UL 1778	cUL Listed, CSA, FCC Part 15 Class A, ISO 14001, ISO 9001, UL 1778
Standard warranty	2 years parts	2 years parts	2 years parts	2 years parts	2 years parts	2 years parts	2 years parts	2 years parts



