

Technical specifications

Symmetra PX 20 kW	
Input	
Grid system	3P + N + G
Voltage range	177 – 240 V
Frequency	50/60 Hz +/- 3 Hz (auto sensing)
Frequency range	40 – 70 Hz
Power factor (PF)	0.99 at full load
THDi (full load)	< 6%
Nominal input current	61.3 A @ 208 V
Maximum input current	70.9 A (nominal vin, 10% charging batteries)
Input current limit	89.4 A
Output	
Power rating	20 kW
Grid system	3P + N + G
Voltage (nominal)	208 V
Nominal output current	55.5 A @ 208 V
Maximum output current (in bypass @ 125% overload)	69.4 A @ 208 V
Frequency	Output frequency: 57 – 63 Hz, configurable for +/-0.1 Hz and +/-10 Hz
Synchronized slew rate	1 Hz/s
Overload (normal and battery operation)	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
Bypass input (bypass operation)	
V nominal	208 V
Frequency (nominal)	60 Hz
Frequency (range)	40 – 70 Hz
Nominal input current	55.5 A
Efficiency	
AC-AC at nominal mains	up to 95%
Mechanical	
Dimensions (H x W x D)	81.5 x 23.5 x 35.6 in. (2,068 x 597 x 905 mm)
Weight	UPS, no modules: 301 kg (665 lb.) UPS fully populated: 818 kg (1,803 lb.)
Environmental	
Storage temperature, UPS, and batteries	-15 to 40 °C (5 to 104 °F)
Operating temperature*	0 to 40 °C (32 to 104 °F)
Regulatory compliance	
CSA, FCC Part 15 Class A, IEC 61000-3-2, IEC 61000-3-3, UL 1778, OSHPD	

*For optimum battery life, the operating temperature range is 18 – 27 °C (64 – 80 °F).

Technical specifications

Symmetra PX 40 kW	
Input	
Grid system	3P + N + G
Voltage range	166 – 240 V
Frequency	50/60 Hz
Frequency range	40 – 70 Hz
Power factor (PF)	> 0.96 @ 50% load > 0.99 at 100% load
THDi (full load)	< 6%
Nominal input current	123 A @ 208 V
Maximum input current	154 A (continuous, at min. mains voltage)
Maximum short circuit withstand	30 kA
Output	
Power rating	40 kW
Grid system	3P + N + G
Voltage (nominal)	208 V
Nominal output current	111 A @ 208 V
Maximum output current (in bypass @ 125% overload)	139 A @ 208 V
Frequency	Output frequency: 57 – 63 Hz, synchronized to input
Slew rate	Programmable to 0.25, 0.5, 1, 2, 4, and 6 Hz/s
Overload (normal and battery operation)	150% for 30 seconds
V thd	100% linear load: < 2% THD max. 100% nonlinear load: < 5% THD max.
Load PF	From 0.9 leading to 0.8 lagging without any derating
Bypass input (bypass operation)	
V nominal	208 V
Voltage (range)	+/-15% of nominal
Frequency (nominal)	60 Hz
Frequency (range)	40 – 70 Hz
Nominal input current	111 A
Efficiency	
AC–AC at nominal mains	Up to 95%
Mechanical	
Dimensions (H x W x D)	2,080 x 600 x 915 mm (82 x 24 x 36 in.)
Weight	UPS, no modules: 275 kg (600 lb.) UPS fully populated: 775 kg (1,708 lb.)
Environmental	
Storage temperature, UPS, and batteries	-15 to 40 °C (5 to 104 °F)
Operating temperature*	0 to 40 °C (32 to 104 °F)
Regulatory compliance	
ULc Listed, EN 50091-1, EN 50091-2, EN 50091-3, FCC Part 15 Class A, ISO 14001, ISO 9001, UL 1778, UL 60950, ENERGY STAR	

*For optimum battery life, the operating temperature range is 18 – 27 °C (64 – 80 °F).

Technical specifications

Symmetra PX 100 kW	
Input	
Grid system	3P + N + G
Voltage range (full load)	177 – 239 V
Frequency	50/60 Hz
Frequency range	40 – 70 Hz
Power factor (PF)	> 0.99% @ > 25% load
THDi (full load)	< 5%
Nominal input current	296 A @ 208 V
Maximum input current	327 A (nominal vin, 10% charging batteries)
Input current limit	360 A
Maximum input short-circuit level	30 kA
Output	
Power rating	100 kW
Grid system	3P + N + G
Voltage (nominal)	208 V
Nominal output current	278 A @ 208 V
Frequency	Frequency regulation: 50/60 Hz bypass synchronized, 50/60 Hz +/-0.1% free running
Synchronized slew rate	Programmable to 0.25, 0.5, 1, 2, 4, 6 Hz/s
Overload (normal and battery operation)	150% for 30 seconds
V thd	< 2% @ 100% resistive load, < 6.5% @ 100% SMPS load
Load PF	From 0.5 leading to 0.5 lagging without any derating
Bypass	
V nominal	208 V
Voltage (range)	+/-10%
Frequency (nominal)	50/60 Hz
Frequency (range)	+/-0.1 Hz, +/-3 Hz, +/-10 Hz (user selectable)
Nominal input current	278 A @ 208 V
Maximum overload input current (125% continuous)	347 A
Efficiency	
AC–AC at nominal mains	up to 95%
Mechanical	
Dimensions (H x W x D)	2,011 x 1,200 x 1,070 mm (79.2 x 47.2 x 42.1 in.)
Maximum weight	4,224 lb (1,920 kg)
Environmental	
Storage temperature, UPS, and batteries	-15 to 40 °C (5 to 104 °F)
Operating temperature*	0 to 40 °C (32 to 104 °F)
Regulatory compliance	
UL 1778 fourth edition, FCC Part 15, EN/IEC 62040-3, CE, OSHPD, ENERGY STAR	

*For optimum battery life, the operating temperature range is 18 – 27 °C (64 – 80 °F).

Technical specifications

Symmetra PX 250		Symmetra PX 500	
Input			
Grid system	Single feed: 3P + N + G, 3P + G; Dual feed: 3P + G		
Grid parallel system	Single feed: 3P + N + G; Dual feed: 3P + G		
Voltage range	+/- 15% for full performance; 408 – 552 V @ 480 V		
Frequency	50/60 Hz		
Frequency range	40 – 70 Hz with 10 Hz/s slew rate		
Power factor (PF)	> 0.995 at load = 100% > 0.99 at load > 50% > 0.97 at load > 25%		
THDi (full load)	< 5%		
Nominal input current	315 A @ 480 V	630 A @ 480 V	
Maximum input current	346 A @ 480 V (nominal vin, 10% charging batteries)		693 A @ 480 V (nominal vin, 10% charging batteries)
Input current limit	372 A @ 480 V	745 A @ 480 V	
Maximum input short-circuit level	65 kA (50 kA with standard MBwD)		
Output			
Power rating	250 kW	500 kW	
Grid system	3P + N + G, 3P + G		
Voltage (nominal)	380 V/400 V/415 V/480 V L-L		
Nominal output current	301 A @ 480 V	601 A @ 480 V	
Frequency	Output frequency: 55 – 65 Hz, configurable for +/- 0.1, 1, 2, 4, 6, 8% Frequency regulation: 50/60 Hz bypass synchronized, 50/60 Hz +/-0.1% free running		
Synchronized slew rate	Programmable to 0.25, 0.5, 1, 2, 4, 6 Hz/s		
Overload (normal and battery operation)	150% for 60 seconds, 125% for 10 min, 125% continuous		
V thd	< 2% from 0 to 100% linear load, < 3% full nonlinear load according to IEC/EN 62040-3		
Load PF	From 0.5 leading to 0.5 lagging without any derating		
Bypass			
V nominal	380 V/400 V/415 V/480 V L-L		
Voltage (range)	+/-10% (from selected voltage)		
Frequency (nominal)	50/60 Hz		
Frequency (range)	+/-0.5%, +/-1%, +/-2%, +/-4%, +/-6%, and +/-8% (user selectable)		
Nominal input current	301 A @ 480 V	601 A @ 480 V	
Efficiency			
AC–AC at nominal mains	> 96% at 50 – 100% load		
DC–AC at nominal battery voltage	> 95% at 25 – 49% load		
Mechanical			
Dimensions (H x W x D)	Minimum (stand-alone UPS, no batteries): 1,991 x 1,600 x 1,070 mm (78.7 x 63 x 42.1 in.) Maximum (UPS with MBwD and 6 min. battery runtime): 1,991 x 3,100 x 1,070 mm (78.7 x 121.9 x 42.1 in.)	Minimum (stand-alone UPS, no batteries): 1,991 x 1,600 x 1,070 mm (78.7 x 63 x 42.1 in.) Maximum (UPS with MBwD and 6 min. battery runtime): 1,991 x 5,200 x 1,070 mm (78.7 x 204.7 x 42.1 in.)	
Weight	Minimum (stand-alone UPS, no batteries): 1,057 kg (2,330 lb.) Maximum (UPS with MBwD and 6 min. battery runtime): 4,509 kg (9,940 lb.)	Minimum (stand-alone UPS, no batteries): 1,722 kg (3,797 lb.) Maximum (UPS with MBwD and 6 min. battery runtime): 8,336 kg (18,377 lb.)	