

DEFENDER SERIES

Surge + Diagnostic

Protect and diagnose rack gear intelligently

Built with state-of-the-art microprocessor protection technology and diagnostic software, the SurgeX Defender Series Diagnostic Rack Mount offers an industrial-grade Power Conditioning System that enables technicians to troubleshoot and diagnose power anomalies in and out of the field.

Perfect for service teams that need to protect equipment and also analyze power quality disruptions, our diagnostic rack solution gives technicians access to customize power protection settings, download time-stamped reports, and diagnose power related service calls proactively via our innovative diagnostic software.



Our Multi-Stage technology is superior to single-stage MOV circuitry found in conventional surge protectors and is instrumental in reducing downtime. It insures the highest level of protection from damaging surges, spikes, over voltage, EMI/RFI noise, and wiring faults—80% of which occur from within a building every day. It is completely non-sacrificial and never requires reset, even after repeated power disturbances.



Features:

- Enables service teams to diagnose power related service calls
- Includes diagnostic software to analyze power quality data and customize power settings
- Shields rack equipment from catastrophic electrical surges, noise, and other power anomalies that can cause downtime, disruption, and equipment shutdown
- Improves the reliability of connected equipment
- Includes fail-safe technology that is superior to typical surge suppressors

	Model Number	Plug Configuration		Description
		Input	Output	
	SX-HS-15-R	 NEMA 5-15P	 NEMA 5-15R (8x)	Defender Series Diagnostic Rack Mount, 120V/15A, 1U
	SX-HS-20-R	 NEMA 5-20P	 NEMA 5-15R (6x) NEMA 5-20R (2x)	Defender Series Diagnostic Rack Mount, 120V/20A, 1U
	SX-HS-L630-R	 NEMA L6-30P	 NEMA L6-30R (1x)	Defender Series Diagnostic Rack Mount, 208V/30A, 2U
	SX-HS-L630-RDB	 NEMA L6-30P (2x)	 NEMA L6-30R (2x)	Defender Series Diagnostic Rackmount, 208V/30A, 2U One device with two fully redundant lines of protection with no commonality in circuitry
	XG-PCS-IC-1			Next Gen PCS Interface Cord, 1 Cord

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Technical Specifications	SX-HS-15-R/ SX-HS-20-R	SX-HS-L630-R	SX-HS-L630-RDB
Voltage Rating	120 Volts	120/230 Volts Split Phase	120/230 Volts Split Phase x 2 Circuits
Load Rating	15/20 Amps at 120 Volts	30 Amps at 208 Volts	30 Amps at 208 Volts x 2 Circuits
Voltage Protection Rating	330V All Modes	800V Line - Line 500V Line - Ground	Pending
Input Connector	NEMA 5-15P/NEMA 5-20P	NEMA L6-30P	L6-30P x 2 Circuits
Output Connector	(8) NEMA 5-15R	NEMA L6-30R	L6-30R x 2 Circuits
Attenuation	Normal Mode: >30dB 80kHz -50MHz Common Mode: >30dB 70kHz -50MHz	Normal Mode: >30dB 80kHz -50MHz Common Mode: >30dB 200kHz -50MHz	Normal Mode: >30dB 80kHz -50MHz Common Mode: >30dB 200kHz -50MHz
Power Requirement (no load)	4 Watts	6 Watts	6 Watts x 2 Circuits
Under-Voltage Shutdown	Adjustable from 80 Volts to 95 Volts, or Disabled. Restores at 105 Volts	Adjustable from 140 Volts to 170 Volts, or Disabled. Restores at 190 Volts	Adjustable from 140 Volts to 170 Volts, or Disabled. Restores at 190 Volts
Over-Voltage Shutdown	Adjustable from 135 Volts to 160 Volts. Restores at 130 Volts	Adjustable from 260 Volts to 300 Volts. Restores at 250 Volts	Adjustable from 260 Volts to 300 Volts. Restores at 250 Volts
Response Time	100msec Over-Voltage 150msec Under-Voltage	100msec Over-Voltage 150msec Under-Voltage	100msec Over-Voltage 150msec Under-Voltage
Under-Voltage Record Event Definition	AC voltage has dropped below 100V	AC voltage has dropped below 180V	AC voltage has dropped below 180V
Over-Voltage Record Event Definition	AC voltage has risen above 135V	AC voltage has risen above 260V	AC voltage has risen above 260V
Power Outage Event Definition	AC voltage has dropped below 20V	AC voltage has dropped below 20V	AC voltage has dropped below 20V
Voltmeter Accuracy	Peak reading type. Typical product accuracy is ±2% between 40V and 180V	Peak reading type. Typical product accuracy is ±2% between 100V and 300V	Peak reading type. Typical product accuracy is ±2% between 100V and 300V x 2 Circuits
Internal Memory Capacity	60 Events with timestamp 999 counts of each event type	60 Events with timestamp. 999 counts of each event type	60 Events with timestamp x 2 Circuits 999 counts of each event type x 2 Circuits
Timestamp accuracy	±2.5%	±2.5%	±2.5%
Data Interface	XG-PCS-IK Custom USB –RJ25	XG-PCS-IK Custom USB –RJ25	XG-PCS-IK Custom USB –RJ25 x 2
Computer Requirements	For use with Diagnostic Software. Minimum 133MHz Pentium processor (or equivalent), minimum 64MB of RAM, minimum 10MB free hard drive space, VGA or higher resolution monitor, keyboard, mouse, CD or DVD drive, minimum screen resolution of 1024x768, Microsoft Windows 2000/XP/Vista/7	For use with Diagnostic Software. Minimum 133MHz Pentium processor (or equivalent), minimum 64MB of RAM, minimum 10MB free hard drive space, VGA or higher resolution monitor, keyboard, mouse, CD or DVD drive, minimum screen resolution of 1024x768, Microsoft Windows 2000/XP/Vista/7	For use with Diagnostic Software. Minimum 133MHz Pentium processor (or equivalent), minimum 64MB of RAM, minimum 10MB free hard drive space, VGA or higher resolution monitor, keyboard, mouse, CD or DVD drive, minimum screen resolution of 1024x768, Microsoft Windows 2000/XP/Vista/7
Dimensions	17.44" W x 10.50" D x 1.71" H (1 RU)	17.000" W x 10.670" D x 3.350" H (2 RU)	17.000" W x 17.000" D x 3.350" H (2 RU)
Weight	12 lbs.	15 lbs.	25 lbs.
BTU/h	80 BTU/h Maximum at full rated load / 100 BTU/h Maximum at full rated load	100 BTU/h Maximum at full rated load	200 BTU/h Maximum at full rated load
Temperature Range	5°C to 40°C	5°C to 40°C	5°C to 40°C
Humidity Range	5% to 95% R.H. Non-condensing	5% to 95% R.H. Non-condensing	5% to 95% R.H. Non-condensing
Agency Listings	ETL Certified to TIA/EIA-568-B.2 Cat 5e ETL Certified to UL 1449 ETL Certified to UL 1283 ETL Certified to CSA 22.2 No. 8-M1986 (R2008)	ETL Certified to UL 1449 ETL Certified to CSA C22.2 No. 8-M1986 (R2008)	ETL Certified to UL 1449

* Specifications subject to change without notice

** All listed specifications obtained at an ambient temperature of 25°C