## **Product Information**



## Plug-in Point of Use Protection







## 100% Surge Protection, 0% Failure

Protecting electronics at the point-of-use is quick, convenient, and most effective. Zero Surge series mode products protect connected equipment repeatedly from even worst case surges without degradation or failure. Zero Surge's core technology has been certified for performance and endurance, in addition to safety. It was subjected to 1,000 worst case surges of 6,000 Volts/3,000 Amps in 30 second intervals without any resulting degradation or failure. This equates to 10 years of worst case surges, but Zero Surge's in-service history proves that the products will serve far beyond a 10 year life. There have been no reports of surge failures, no fires, and no recalls since Zero Surge began manufacturing in 1989.

Zero Surge's Spectrum Wide Voltage Range (WVR) technology, effectively senses and suppresses surges on your 120V power line even when the power is low as 85 Volts or high at 175 Volts and anywhere in between. This is especially beneficial when the voltage is variable and unpredictable, during brownout and blackout conditions, and when standby generators are in use. It also provides the benefit of conditioning the power line by removing EMI and RFI disturbances which can disrupt data signals and cause electronic equipment to malfunction. These disturbances can also degrade the electronic components in the equipment, shortening the life expectancy.

The superior power conditioning and high reliability provided by Zero Surge's series mode with Spectrum WVR technology makes it the preferred choice in the A/V and IT industry.

## Features:

- 1U Rack Mountable
- Isolated receptacles
- Built-in capacity matching, resettable circuit breaker
- 10R units have 2 switches master on/off and auxiliary controls 4 rear outlets
- 10R units easily convert to modular units
- Repeatedly suppresses worst case surges
- No metal oxide varistors (non-MOV technology)
- Filter operates independent of ground line—can be used in ungrounded outlets
- Non-sacrificial—does not wear out or degrade
- Made in USA
- 10 year warranty

Model	Item #	Capacity	Input	Output	Cord Length/Plug/Gauge
8R-1U-20W-I	#002-00166	20A / 120V	NEMA 5-20P	NEMA 5-15R (x4) 0	8.5' Cord / Straight Plug / 12 Gauge
10R-1U-15W-I (Converts to modular)	#002-00142	15A / 120V	NEMA 5-15P	NEMA 5-15R (x10)	10' Cord / Straight Plug / 14 Gauge
10R-1U-20W-I (Converts to modular)	#002-00153	20A / 120V	NEMA 5-20P	NEMA 5-15R (x6) 0 NEMA 5-20R (x4)	8.5' Cord / Straight Plug / 12 Gauge

<b>Technical Specifications</b>	8R-1U-20W-I #002-00166	10R-1U-15W-I #002-00142	10R-1U-20W-I #002-00153			
Voltage Rating	20A / 120V	15A / 120V	20A / 120V			
	*Wide Voltage Range (WVR) Technology operates over a voltage range of 85-175V.					
Operating Temperature Range	0-40° C / 32-104° F					
Technology/Mode	Series Mode with Wide Voltage Range (WVR) Technology, Mode 1 applications, L-N (filter operates independent of ground line)					
Agency Certifications	ETL & cETL certified to UL 1283 7th Edition, UL 1363, CSA 22.2 No. 8 (Control #3162119)					
Limiters	Series surge reactor current limiter; cascaded, auto-tracking dual polarity dynamic surge and noise sensing; bi-modal dynamic filtering. Parameters optimized for switch-mode power supply protection.					
Dynamic Filtering Onset	172V nominal, 2V above peak line voltage (auto-tracking, WVR)					
Max Surge Voltage Let-through	130V above peak line voltage @ 6,000V/3,000A for ANSI C62.41 Category B3/C1 Combination Wave					
Max. Applied Pulse Voltage	6,000V (1.2 x 50 μs—ANSI C62.41 Combination Wave)					
Max. Applied Pulse Current	Does not apply to this technology.					
Joule Rating	No metal oxide varistors to wear out; therefore, not applicable to this technology.					
Endurance Rating	1,000 worst case pulses: ANSI C62.41, Category B3/C1 pulses (6,000V/3,000A); >10,000 pulses @ 4,000V; >100,000 pulses @ 2,000V					
Filter Slew Rate	$5{,}000\text{V/}\mu\text{s}$ disturbance reduced to $35\text{V/}\mu\text{s}$ within AC power wave envelope; $10\text{V/}\mu\text{s}$ outside the power wave envelope					
EMI/RFI Filter Response (50 ohm Rgen., load)	Bi-directional, wave tracking — 3 dB @ 7 kHz; 25 dB @ 100 kHz; 38 dB @ 300 kHz					
Enclosure	Magnetic shielding steel, black powder coat finish					
Weight	9.25 lbs	9.38 lbs	9.5 lbs			
Dimensions	1.75" H x 19" W x 8.5" D	1.75" H x 19" W x 8.5" D	1.75" H x 19" W x 8.5" D			
Options:	Longer cord lengths are available for all units. A NEMA L-5-20P locking plug is available for the 8R-1U-20W-I.					

<sup>\*</sup>L-N reversal can compromise any appliance's safety and performance. Check line wiring for hot/neutral reversal prior to connecting product.

This series may not be daisy chained with power strips, surge protectors, or uninterruptible power supplies.

Suggested applications: IT equipment, A/V equipment, home theater and home electronics and equipment requiring 20A capacity and 20A receptacles.









