

**Transient Voltage  
Surge Suppressors By:**

**ST-PIU2 / ST-SPIU2**

Two Outlet Wall-Mount Plug-In Device



*"Power Quality is our Only Business"*

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The Series ST-PIU2/ST-SPIU2 are high performance, industrial grade devices designed to protect critical point of use electronics such as computers/servers, copiers, phone systems, security systems, and other mission critical equipment from damage due to any level of surge activity ranging from internally generated to the more severe found in larger industrial facilities. This device is intended to be applied to standard wall outlets making installation a breeze.

Our products incorporate two stages of fusing - individual component - level fusing as well as phase level fusing via a non-resettable fuse-link for ultimate safety.

The unique design of these devices makes them among the most versatile TVSS devices on the market with superior performance specs and a warranty that is second to none.

**GENERAL**

**Description:** Single-circuit, point-of-use, AC power Transient Voltage Surge Suppression with encapsulated **Optimal Response Network™** circuitry and optional **Frequency Attenuation Network™**(ST-SPIU2 only) for virtual elimination of ringwave type transients. For use on a wide variety of circuits using plug-in connections.

**Application:** NEMA 5-15, 120 OR 220 Vrms circuits feeding sensitive & general purpose loads

**Warranty:** **Twenty-five years Unlimited Free Replacement**

**MECHANICAL**

**Enclosure:** Plastic, UL 94V-0

**Plug-Receptacle Type:** 125 or 220 Volt, 15 Amp, NEMA 5-15 socket

**Connection Method:** Direct, single plug-in / Duplex outlet

**Shipping Weight:** < 1 lb.

**Dimensions:** 4" L, 2.125" W, 2.5" H

**ELECTRICAL**

**Circuit Design:** Two stage circuitry using local common ground window for AC power (2 outlets) with series wired, parallel connected, hybrid design incorporating discrete all-mode protection and utilizing our **Optimal Response Network™** design. For maximum performance select models with **Enhanced Sinewave Tracking™** (ST-SPIU2 only) circuitry, providing lowest possible let-through-voltages, available.

**Protection Modes:** All Modes: L-N (normal mode); N-G, L-G (common mode)

**Input Power Frequency:** 50-60 Hz

**Response Time:** < 1 ns

**Peak Surge Current** 30 kA per mode / 90 kA total

**Maximum Continuous**

**Operating Voltage:** 150 / 300 Vrms

**Maximum Continuous**

**Operating Current :** 15 Amps rms

**Circuit Diagnostics:** LED indicator for power and LED indicator for suppression circuit.

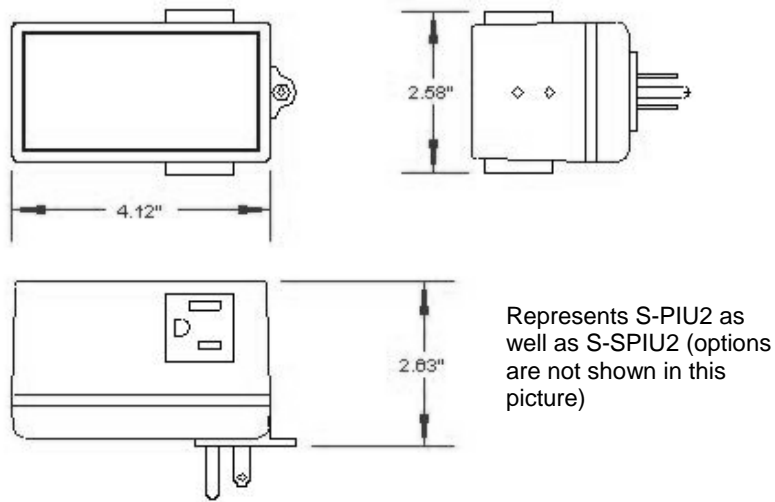
**Available Options:** **R=** RJ14 voice type protection (input /output); **C=** F-Type Coaxial protection (input/output); to be placed at end of model number. Example: ST-PIU2-C. For specific information regarding these options please see their corresponding spec sheets.

## LET-THROUGH VOLTAGE PERFORMANCE AND ELECTRICAL SPECIFICATIONS

Model	Circuit Type	MCOV	Peak Surge Current (Amps) per mode	Modes	ANSI/IEEE C62.41 Test Category & C62.45 Test Environment		
					A1 Ring Wave 2 kV, 67 A 180° Phase Angle	A3 Ring Wave 2 kV, 67 A 90° Phase Angle	B3/C1 Impulse Wave 6 kV, 3 kA, 90°
ST-SPIU2	120 V, Single Ø (2 wire + ground)	150 150 150	30,000 Amps	L-N L-G N-G	37 V (S) 328 V (S) 331 V (S)	N/A	290 V 267 V 452 V
ST-SPIU2-220	220 V, 2 wire + ground)	300 300 300	30,000 Amps	L-N L-G N-G	72V (S) 109V (S) 36V (S)	135V (S) 235V (S) 130V (S)	578V (S) 588V (S) 705V (S)
ST-PIU2	120 V, Single Ø (2 wire + ground)	150 150 150	30,000 Amps	L-N L-G N-G	N/A	208 V 211 V 365 V	290 V 267 V 452 V

**Let-Through Voltage Test Environment** using test parameters as defined by Underwriters Laboratory: Dynamic (D) or Static (S), Positive Polarity. Time base=10µs. All voltages are peak (±10%), 90° phase angle voltages are measured from the injection point to the peak of the surge.

Single-pulse, surge current testing for all modes at rated currents, is in compliance with NEMA LS 1-1992. Single-pulse, surge current capacities of 200,000 amps or less are determined by single-unit testing of all components within each mode. Present industry test equipment limitations require testing of individual components or sub-assemblies within a mode for single-pulse, surge current capacities over 200,000 amps.



Actual unit may vary from picture.