## Transient Voltage Surge Suppressors By:

## S-SPT120-15-1T1V

Series Wired AC Unit with Sine Wave Tracking and Discrete All-Mode Protection with Telecom / Video line





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The Series S-SPT120-15-1T1V devices provide the absolute best ring wave transient protection available for a device of its type. These devices are intended for single 120 VAC circuit applications at locations feeding sensitive/critical equipment combined with a line designed to protect standard voice grade telephone lines and twisted pair video feeds. It is extremely effective in limiting transients generated inside the facility and is an absolute must on circuits feeding critical microprocessor based equipment. It boasts a robust 20 kA per mode peak surge current rating.

We believe that we offer the most versatile TVSS devices on the market with superior performance specs and a warranty that is second to none.

GENERAL	
Description:	Series wired, parallel connected transient voltage surge suppressor with encapsulated
	Optimal Response Network™ circuitry (20 kA per mode peak surge current) and Enhanced
	Sinewave Tracking™ for virtual elimination of ring wave type transients.
Application:	Series: Designed for use at ANSI/IEEE Category A with susceptibility up to medium exposure
	levels to protect sensitive/critical loads fed by a single 120 VAC circuit.

Telco/Coax: Designed for use on Standard 3002/C2 unconditioned voice grade lines, fax lines, modem lines and **ISDN** lines to protect data transmission system equipment from

damaging transients generated outside of the facility.

Warranty: 25 Years Unlimited Free Replacement

MECHANICAL

**Enclosure:** Plastic, UL 94V-5VA **Mounting:** External mounting feet.

**Connection Method:** Series: Screw terminals at both the input and output sides of the device.

Shipping Weight: < 4 lbs

ELECTRICAL

Circuit Design: Series wired, parallel connected hybrid design incorporating discrete all mode protection and

utilizing our encapsulated Optimal Response Network™ design and Enhanced Sinewave Tracking™ circuitry to provide lowest possible let-through-voltages. All suppression circuits are encapsulated in our high dielectric compound to promote long component life and

protection from the environment and/or vibration.

Protection Modes: Series: Dedicated protection components and circuitry for each mode. Discrete L-N (Normal

Mode), and Discrete L-G, N-G (Common Mode)

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

PERFORMANCE	SERIES	TELECOM	VIDEO (Twisted Pair)
Maximum Continuous Operating Voltage:	150 Vrms	130 Vrms	75 Vpk
Maximum Continuous Operating Current:	15 A	5 A	500 mA
Series Resistance:	0 Ohms	0 Ohms	0 Ohms
Maximum Data Rate / Freq:	50/60 Hz	Up to 100 Kbps	≤ 150 Mbps / 1.4 GHz
Peak Surge Current per Pair:	60 kA total	30 kA	10 kA L-G
Number of Lines:	1 curcuit	1 Pair	1 Pair

MEASURED LIMITING VOLTAGE PERFORMANCE AND ELECTRICAL SPECIFICATIONS						
Model	MCOV	Mode	*ANSI/IEEE C62.41-1991 Measured Limiting Voltage Test Categories			
			Cat A, 30 Ω 100 kHz Ring Wave 2 kV / 67 A @ 270° Phase Angle	Cat B, 2 Ω Impulse Wave 6 kV / 3 kA @ 90° Phase Angle		
	150 P-N	P-N	25 (D)	316 (D)		
S-SPT120-15-1T1V	150 P-G	P-G	50 (D)	429 (D)		
	150 N-G	N-G	32 (S)	498 (S)		

\*Measured Limiting Voltage (Let-Through) Test Environment: Dynamic (D) or Static (S), positive polarity. All voltages are peak (±10%). Time Base is 1ms. 180° phase angle voltages are measured form the zero crossing, 90° phase angle voltages are measured from the positive peak of the sine wave to the positive peak of the surge indicating actual excess voltage let through. All tests were performed with the device connected in series simulating actual installation.

Let-through Voltage Test Environment ANSI/IEEE C62.45 & C62.41; Static, Positive Polarity All voltages are peak (±10%)					
	est ode	Test Category B3/C1 Impulse Wave 6 kV, 3 kA			
TELE	T/R T/R -G	< 420 V < 420 V			
VIDEO	L-G	251 V			

