

**Transient Voltage
Surge Suppressors By:**

4-20mA Current Loop Models

Current Loop protection device with Discrete All-Mode Protection



P.O. Box 330607
Ft. Worth, TX 76163
Phone: 817.483.8497
Fax: 817.572.2242
www.sinetamer.com

Power Quality is our Only Business™

The SineTamer® ST-CL devices are designed to protect current loop circuits, signal lines and/or low speed data lines feeding transducers, leak detectors, flow meters and a broad variety of similar sensory devices.

This device is connected in series using the wire clamping terminal strips provided, making your installation a breeze. A ground lug is provided on the side of the unit to insure a low impedance ground discharge path. The unique design of these devices make them among the most versatile TVSS devices on the market with performance specs that are superior to our competitors and a warranty that is second to none.

GENERAL

Description:	Series wired transient voltage surge suppressor with encapsulated Optimal Response Network™ circuitry for protection of current loop circuits, signal lines and other low speed data circuits.
Application:	Designed for use with data collection and switching circuits to protect data transmission system equipment from damaging transients generated between terminals and equipment in the data collection/transmission system.
Warranty:	25 Years Unlimited Free Replacement

MECHANICAL

Enclosure:	Plastic, UL 94V; Metal bottom section with ABS plastic terminal housing upper half.
Mounting:	External mounting feet.
Connection Method:	Wire clamping box terminals located at the input and output sides of the device. Wire size: Lines #18-22 AWG, Ground #6-12 AWG. PDB version - Lines: standard punch down block terminals (#26 wire min - #22 wire max)
Shipping Weight:	≈1lbs and 6 lbs.

CIRCUITRY

Circuit Design:	Series wired hybrid design incorporating discrete all mode protection and utilizing our encapsulated Optimal Response Network™ design to provide lowest possible let-through voltages. All suppression circuits are completely encapsulated in our exclusive compound to assure long component life and complete protection from the environment and/or vibration.
Protection Modes:	Dedicated protection components and circuitry for each mode. Discrete L-L (Normal Mode) and L-G (Common Mode)

PERFORMANCE

Maximum Continuous Operating Voltage:	36VDC or 62VDC
Maximum Continuous Operating Current:	500 mA
Frequency Range:	DC to 2MHz
Maximum Data Rate:	Up to 2 Mbps
Series Resistance:	5 Ohms per wire (10 Ohms loop)
Peak Surge Current per Pair:	L-L 10 kA, L-G 10 kA
Response Time:	<1 nanosecond

Because we are constantly seeking to improve our products, specifications are subject to change at any time.

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Let-Through Voltages Using ANSI/IEEE C62-41-1991 Test Environment: Static, positive polarity. All voltages are peak ($\pm 10\%$). Time base= $10\mu\text{sec}$.			
Model	Maximum Continuous Operating Voltages (Vpk)	Test Mode	B3/C1 Impulse Wave 6,000V, 3000A
ST-PDBx-D24	36 V	L-G	< 40
	36 V	L-L	< 80
ST-PDBx-D48	62 V	L-G	< 80
	62 V	L-L	< 160

x= 6 pair or 25 pair

