



# SLT Series

## Data/Signal Surge Protection Device

Transient Voltage Surge Suppression for standard low speed data (13.5MHz max), communication and signal line protocols. Units provide **protection against Transient Voltages** that exceed the nominal operating voltage of incoming data. Each line is protected against surge current impulses up to 10kA.

The **SLT device** works in series with the communication lines being protected, diverting harmful transient energy while **maintaining a tight clamp** at the peak voltage. Units are designed to operate in a wide temperature range and are configured for simple EIA (Electronic Industries Association) protocols.

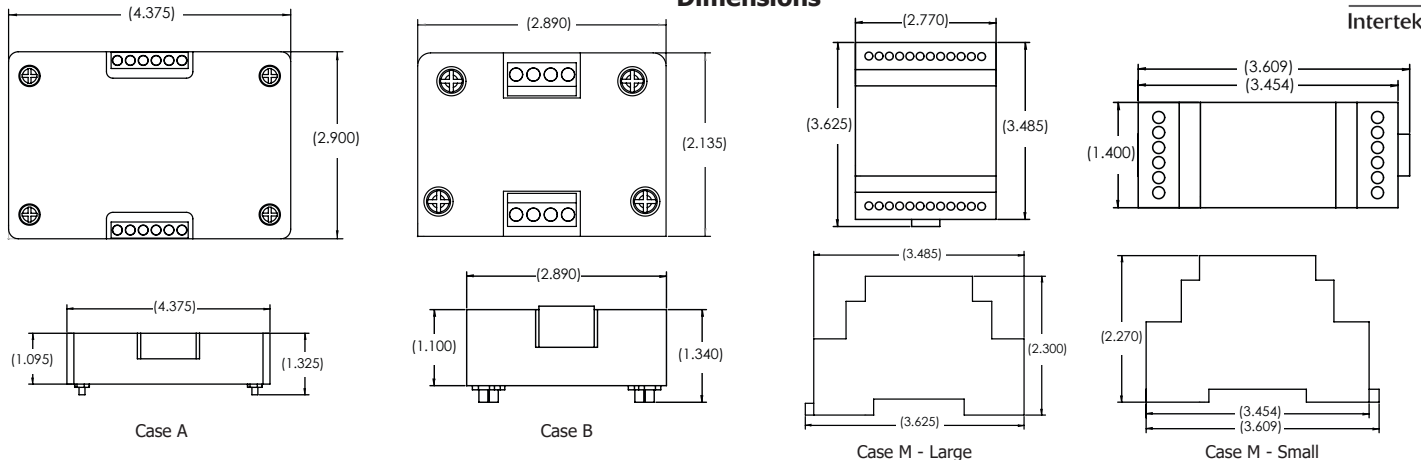
The built in floating ground connection allows the device to provide protection at remote locations without creating a ground loop noise problem.

- Solid state fail-safe design
- Low shunt capacitance to reduce signal loss
- Performance tested to verify compliance



(Other Case Styles Available)

### Dimensions



(Diagrams not drawn to scale)

### Product Specifications

Max. Surge Current	10kA per wire	Clamp Voltage	7.5V - 220V available
Max. Operating Voltage	1.5 - 270 V DC	Enclosure	Plastic (UL Rated 94 5V)
Response Time	<5 nanoseconds	Max. Operating Temp	-40° to +85°C
Series Resistance	5.3 Ohms (nominal)	Warranty	15 Year Product Warranty

Model Number	Circuit Case	Wires	Shield	Polarity	Protocol	Interface
<b>SLT/</b>	<b>XZ</b>	<b>-XX</b>	<b>X</b>	<b>-X</b>	<b>XXX</b>	<b>-XX</b>
Signal Line Treater	Replace X with A = SAD Arrays C = 5kA (Commercial) I = 10kA (Industrial) S = Solid State	Replace XX with 02 = 2 wires 04 = 4 wires 06 = 6 wires 10 = 10 wires	Replace X with 0 = No Shield S = Shield	Replace X with B = Bipolar Protection U = Unipolar protection	Replace XXX with CL1 = 30V CL2 = 55V DC1 = 95V DC2 = 130V DC3 = 195V DC4 = 18V DC5 = 140V SL1 = 25V SL2 = 10V SL3 = 270V SL4 = 45V SL5 = 50V	Replace XX with TS = Terminal Strip Screw RJ = Mod Jacks Consult factory for additional Interface options.
<b>COMMERCIAL UNITS</b> Utilize MOV & SAD Technology		Case A has a 10 wire MAX. Case B has a 4 wire MAX.				
<b>INDUSTRIAL UNITS</b> Utilize Gas Tube & SAD Technology	Replace Z with A = Large Case B = Small Case M = Din Rail Case	Case M Large has a 10 wire MAX. Case M Small has a 4 wire MAX.			Other protocols available, contact factory.	

\*NOTE: Installation is accomplished by simply inserting the Protector in series with the communication cable(s) and connecting the grounds as required.

PROTOCOLS: CL = Closed Loop, DC = DC, SL = Signal Line

All product dimensions provided are ± 0.125

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## GENERAL

1. This document provides detailed information on how to install and operate the SLT Series of Surge Protection Devices (SPD).
2. Incorrect installation may significantly impair the performance of the SPD. It is particularly important that all installation procedures and guidelines be followed exactly.
- 3. INSTALLATION OF THIS SPD SHOULD ONLY BE PERFORMED BY A QUALIFIED INSTALLER.**
4. CHECK TO ENSURE THAT ALL CONNECTIONS ARE CORRECT AND SECURE BEFORE ENERGIZING.
5. KEEP THIS MANUAL IN A SAFE, DRY PLACE FOR FUTURE REFERENCE.

## WARRANTY INFORMATION

Meter-Treater, Inc. (MTI) warrants all SLT Series models to be free from defects, and will at our option repair or replace the product should it fail within fifteen (15) years from the first date of shipment. This warranty is limited to defects in workmanship or materials, and does not cover customer damage, abuse or unauthorized modification. If this product fails or does not perform as specified, your sole recourse shall be repair or replacement as described above. Under no condition shall MTI be liable for any damages incurred by the use of this product. Damages include, but are not limited to, the following: lost profits, lost savings and incidental or consequential damages arising from the use of or inability to use this product. MTI specifically disclaims all other warranties, expressed or implied, and the installation or use of this product shall be deemed an acceptance of these terms by the user.

## WARRANTY RETURNS

All warranty and non-warranty repairs must be returned freight prepaid and insured to MTI. All returns must have a Return Authorization (RA) number on the outside of the shipping container. This number may be obtained from MTI Warranty Department (800) 342-6890. Products returned without an RA number will not be accepted.

IF UNIT(S) ARE RECEIVED DAMAGED,  
NOTIFY THE SHIPPING COMPANY  
IMMEDIATELY. RETAIN ALL SHIPPING  
CONTAINERS AND PACKING MATERIALS FOR  
INSPECTION.

Please Note:  
There are no user serviceable parts inside.



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# SLT DIN Series Surge Protection Device

## USER MANUAL AND INSTALLATION GUIDE



COMMERCIAL INSTALLATIONS

## CAUTION

### **IMPORTANT SAFETY INSTRUCTIONS**

1. Never install communication wiring during a lightning storm.
2. This SPD is for INDOOR USE ONLY.
3. SLT Series suppressors are intended for use as primary protectors for power and/or data lines.
3. Read and understand all instructions prior to installation and operation.

## WARNING

Should your equipment or building be subject to a direct lightning strike, this SPD will not provide complete protection.

**NOTE:** If applicable, the protected device/equipment should also have AC protection because it is still vulnerable to transients on the power lines. Omitting AC protection poses a continued threat of failures at the communication interface.

## GROUNDING

The SPD's ground stud must be connected to the ground reference used by the system being protected. In a computer room environment this grounding point may be the ground bar in the AC power panel. Ground leads longer than 12" are not recommended.

Grounding is accomplished on the 4 wire SPD's via any of the four corner securing screws on the SPD. When the din rail clip is used it will pick up a ground connection becoming part of the unit's ground. A ground lug is also provided and can accommodate up to a #10AWG ground wire. The ground lug can be secured to any one of the four corner screws in order to obtain a ground point.

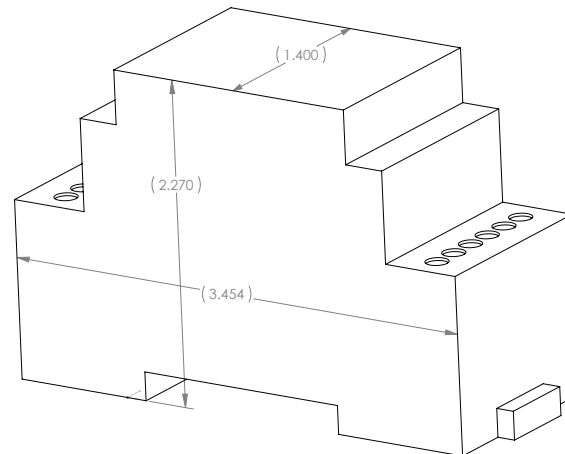
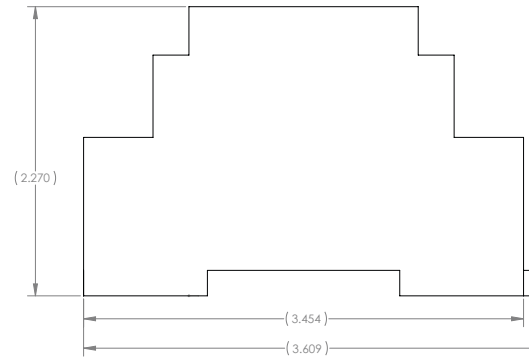
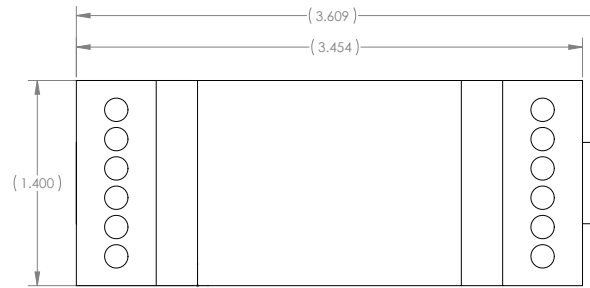
Grounding is accomplished on the 12 and 24 wire units via the ground lug which is located on the top of the SPD. Surge protection devices must not be connected to ground points that are independent of AC ground.

**NOTE:** It is always best to test grounds to verify their existence before relying on them to protect sensitive equipment.

## PERFORMANCE NOTE

The grounding wire must be as short as possible. Minimize length to the centimeter/inch and use a minimum of #14 AWG wire.

## DIMENSIONS



## INSTALLATION

The SLT DIN Series of products are easy to install. The following instructions clearly explain each step:

**NOTE:** Make sure to follow installation instructions exactly; if the SPD is improperly installed, the current limiting feature could be rendered inoperable.

1. Connect the Load (protected) side of the SLT DIN Series product to your equipment using straight wire hookups as short as possible.
2. Connect the incoming (unprotected) wires/cable to the Line (unprotected/exposed) side of the SLT DIN Series product.
3. Connect a #14 AWG ground wire from the SLT ground stud and secure it to the nearest available chassis ground.