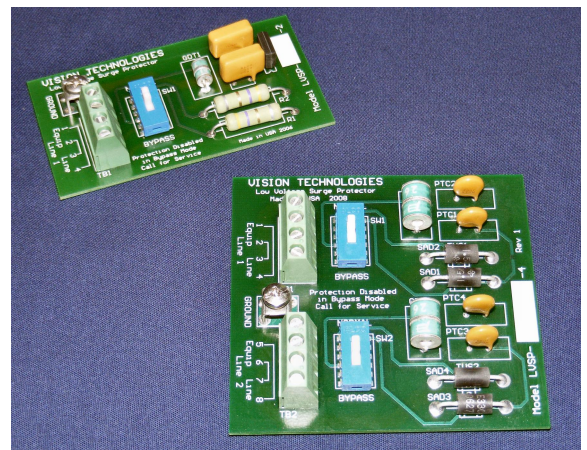


# LVSP Signal Line Protector

*Creating Systems to Control, Power & Integrate Your Business*

## Outstanding Features:

- ◆ Protects telecommunication, computer, control, and alarm systems
- ◆ Utilizes GDT and solid state technologies
- ◆ High surge capacity
- ◆ Fast response time
- ◆ Fully balanced protection
- ◆ Three stages for increased performance
- ◆ Integral bypass switch
- ◆ Fully automatic reset
- ◆ Withstands repeated surges
- ◆ Optional weatherproof enclosure



The LVSP signal line transient protector is designed to protect computers and communication equipment from damaging overvoltages caused by lightning, induced EMF and other related disturbances. These protectors employ the latest technological advances to provide the highest possible degree of protection. They are designed to give years of service with no user maintenance.

The LVSP series incorporates three stage construction for superior protection and redundancy. Stage 1 is a brute force gas discharge tube (GDT) with a peak current rating of up to 10,000 amps. This stage dissipates the majority of energy present in the transient. Stage 2 is a fast trip, resettable PTC fuse which provides isolation between the first and third stages and limits series current to manageable levels. Stage 3 utilizes a solid state thyristor crowbar with nanosecond response time. Initial clamping and fast turn on by the thyristor provide

excellent voltage limiting at currents up to 500 amps. This design makes the LVSP ideal for applications with high exposure to lightning strikes, such as incoming telco lines. In the unlikely event of a failure, the built-in bypass switch enables quick restoration of the protected equipment. The LVSP is available in 2, 4, or 8 line models.

The LVSP Series is designed for use in almost any data communication or control application including:

- Telephone lines (POTS & DSL)
- Serial data communications
- Fuel Dispensers
- Current loops
- Fire alarm
- Security systems
- Access control
- Intercoms

A wide range of clamp voltages are available making these units versatile

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## Installation

Installation should be accomplished as close as possible to the point of entry of the protected cable. Incoming lines are routed to the protector input. The protected signal is then fed from the protector output to the communication equipment. A ground wire is connected from the ground terminal to a low impedance ground connection.

## Connections

Connections are made by screw terminals with integral wire clamps. These terminals accommodate 28-14 AWG conductors. Each protected line has a separate input and output termination. There is also a screw terminal provided for connection of the grounding conductor.

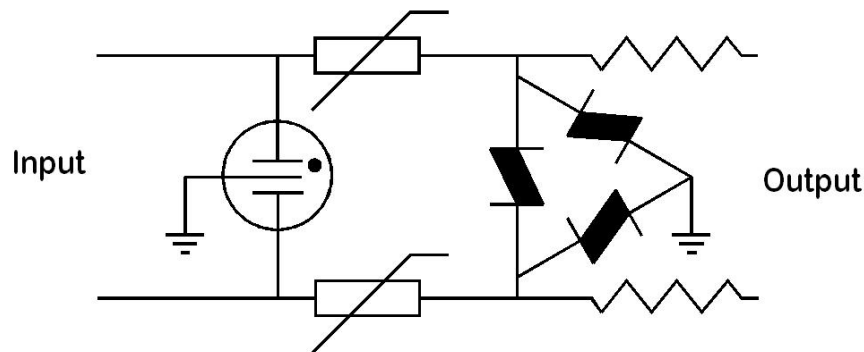
### LVSP Technical Specifications

Stage 1 Peak Current (8/20 microseconds)	10,000 amps per line
Stage 3 Peak Current (8/20 microseconds)	500 amps per line
Response Time	< 1 nanosecond
Maximum series resistance (Custom values available)	2 ohms for data 10 ohms for telco
Voltage ratings (Custom voltages available)	30, 60, 75, 120, 230
Number of lines	2, 4, or 8

### PRODUCT SELECTION

A model number is made up of the prefix LVSP, then the voltage rating and the number of lines desired. For example, to protect a single telephone line with a standard 210 volt ring voltage, specify a LVSP-230-2. For a 2 pair computer data circuit, a LVSP-25-4 would be appropriate. Contact your representative or the factory for assis-

To place an order for a CPI LVSP Signal Line Protector simply call or email CPI with the model number, quantity desired, purchase order number and the ship to address and CPI will do the rest.



LVSP Block Diagram

CALL TODAY AND LET CPI BUILD A  
SYSTEM TO *CONTROL, POWER, &*  
*INTEGRATE YOUR BUSINESS*

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