

# Indoor High Power Single Line DSL/Telephone Lightning Surge Protector Model: HGLN-D1-DT

## **Applications**

- DSL/Telephone lines
- T1/E1/J1 Telco lines

## **Features**

- 3-Stage surge protection
- Screw Terminals
- Provision for shielded cables
- Industrial grade cast aluminum construction
- Integral mounting feet



### **Superior Performance**

The HGLN-D1-DT is a high performance 3-stage lightning protector that provides superior protection for DSL, Telephone and T1 lines from transients and surges.

The first stage is comprised of a differential gas discharge tube. Stage two is a pair of current limiting series resistors and the final stage is a low capacitance diode array. The use of three terminal differential gas discharge tubes provides superior common and differential mode protection against conducted transients versus the use of lower cost two terminal tubes. The second stage series resistance limits the power dissipation of the fast diode clamp array in the third stage. This allows time for the slower but higher power gas tubes to flash over. The diode array clamps the leading edge of fast transients to safe levels until the high power gas tubes turn on. This eliminates the damaging leading edge spike that single stage gas tube protectors let leak through. The diode array's low capacitance assures that the suppressor will not degrade the high-speed signals. The 3-stage design can handle higher-level transients than a protector that uses only diodes.

## Failsafe Feature

The HGLN-D1-DT is designed to convert into a failsafe mode in the rare case of a catastrophic surge or lightning event. For this mode, the resistors in the second stage will fuse and portions of the diode array will short. This effectively disconnects the line from sensitive equipment thus limiting damage. The units are factory repairable

For more complete surge protection of data lines, the use of two units is recommended, one at each end of the line.







## **Specifications**

### **Electrical Specifications**

Applications	Single DSL / Telephone Line
Connections	(2) Screw Terminal Blocks
Stage 1 Clamping Voltage	± 230 volts
Stage 2 Resistance	3.3 ohms
Stage 3 Clamping Voltage	± 170 volts

#### **Mechanical Specifications**

Enclosure Material	Cast Aluminum
Ground Lug	10 AWG Max.
Operating Temperature	-40 C (-40 F) to +80 C (+176 F)
Weight	.28 lbs. (.13 kg)
Dimensions	3.6 x 1.4 x 1.2 (inches) 91.4 x 35.5 x 38.1 (mm)
RoHS Compliant	Yes



#### **Custom Requirements**

The HGLN-D1-DT can be optionally configured to protect differential data lines of other voltage levels. Contact our sales department with your specific requirements or pricing for a volume purchase.