

HyperLink Wireless brand Differential Data Line Lightning Surge Protector - Model: HGLN-D2-05

Applications

- RS-422/485 communications
- RTD applications
- Industrial and building automation
- AISG control lines
- T1/E1/J1 lines



Features

- Industrial grade
- 3-Stage surge protection
- Superior to diode or TVS only based designs
- Cast aluminum construction
- Integral mounting feet
- Protection of digital or analog signal or control lines
- Provision for shielded cables



Description

Superior Performance

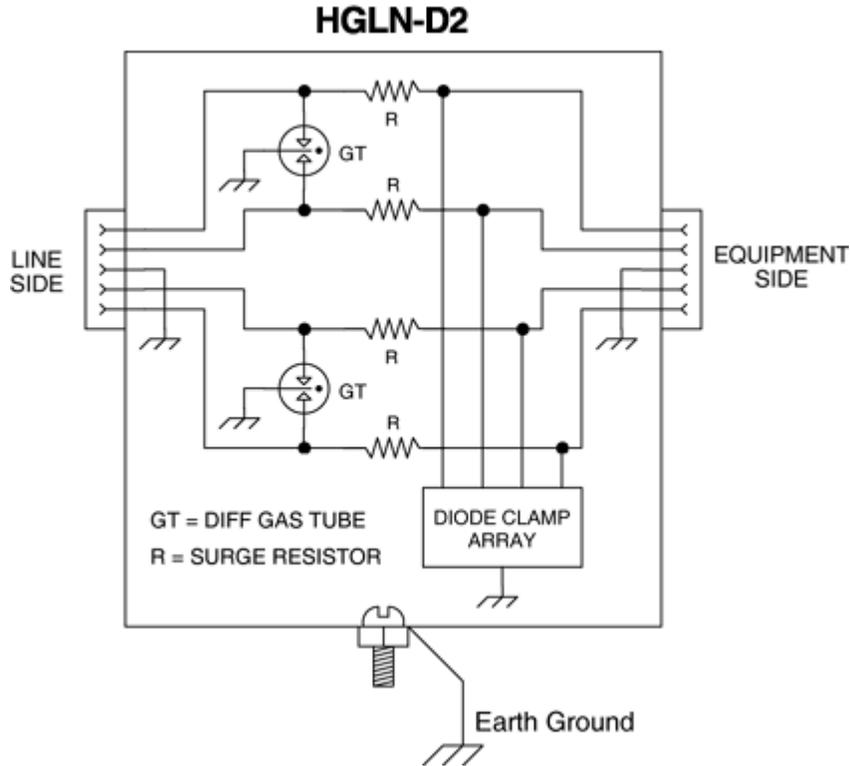
The HGLN-D2-05 high performance 3-stage lightning protector provides superior protection of differential or balanced digital or analog lines from transients and surges. The units will protect two pairs of differential data or analog signal/control lines.

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.

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

Application Note:

Not for use with T1 lines with Ring or DC power.



Mechanical Specifications

Material	Die Cast Aluminum
Operating Temperature	-40 C (-40 F) to +80 C (+176 F)
Weight	.38 lb. (.17 kg)
Dimensions	4.5 x 2.5 x 1.5 (inches) 114.3 x 63.5 x 38.1 (mm)

Electrical Specifications

Model Number	Stage 1 Clamping Voltage	Stage 2 Resistance	Stage 3 Clamping Voltage
HGLN-D2-05	± 90 volts	3.3 ohms	± 7.5 volts

Custom Requirements

The HGLN-D2 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.