

# HyperLink Wireless brand Indoor 4 to 20 mA Current Loop Lightning and Surge Protectors - Model: HGLN-CL2-xx

#### **Applications**

- 4 to 20 mA sensors and controllers
- Industrial process control
- HART Street light controllers
- Toll booths, drawbridges, railroad crossing gates & signals
- Pulse input circuits

#### **Features**

- Dual Channel
- Three-Stage Protection
- Cast aluminum construction with integral mounting feet
- Screw Terminal Blocks
- Available in 12V, 15V and 24V models





#### **Description**

The HGLN-CL2-xx series are high performance 3-stage indoor protectors that provide superior protection of differential or common mode lines from transients and surges. These units will protect two 4-20 mA circuits.

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.

The die cast aluminum enclosure features integral mounting feet. Studs are provided on housing for proper grounding of protector.



# **Specifications**

## **Mechanical Specifications - All Models**

Enclosure 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)		
RoHS Compliant	Yes		

### **Electrical Specifications**

Models	HGLN-CL2-12	HGLN-CL2-15	HGLN-CL2-24	
Connectors	(2) Screw Terminal Blocks			
Stage 1 Clamping Voltage	± 90 volts			
Stage 2 Resistance	3.3 Ohms			
Stage 3 Clamping Voltage	± 15 volts	± 18 volts	± 28 volts	

# **HGLN-CL2-xx**

