

HyperLink Brand Remote Electrical Tilt (RET)/AISG Lightning/Surge Protector for Indoor and Outdoor Applications

Applications

- Remote Electrical Tilt (RET) antenna systems
- Provide surge protection for indoor control units and outdoor antennas

Features

- Protects each pin with gas discharge tubes
- 3-Stage surge protection for EIA-485 signals including ground reference line
- Waterproof housing
- Mounting bracket
- 2 x 8-Pin connectors



Model: HGLN-AISG1

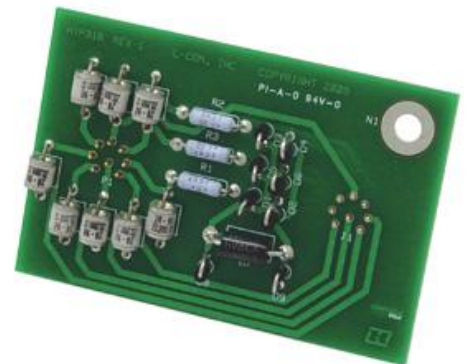
Power Rating: 



Description

The HGLN-AISG1 high performance 3-stage lightning/surge protector provides superior protection from transients and surges for indoor and outdoor Remote Electrical Tilt (RET) equipment utilizing multi-wire control cables. The protector is compatible with AISG control lines and provides individual protection of the Power and RS485 lines within the control cable.

The design utilizes gas discharge tubes on each pin for superior power handling capability. In addition, the three EIA-485 control lines utilize a three-stage design for protection of sensitive semiconductors used in the interface. The first stage is comprised of a ceramic gas discharge tube. Stage two consists of a current limiting series resistor and the final stage is a low capacitance diode-clamping array. 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. The HGLN-AISG1 provides protection for both EIA-485 control line implementations using two or three wires. EIA485+, EIA485- and EIA485gnd.



Failsafe Feature

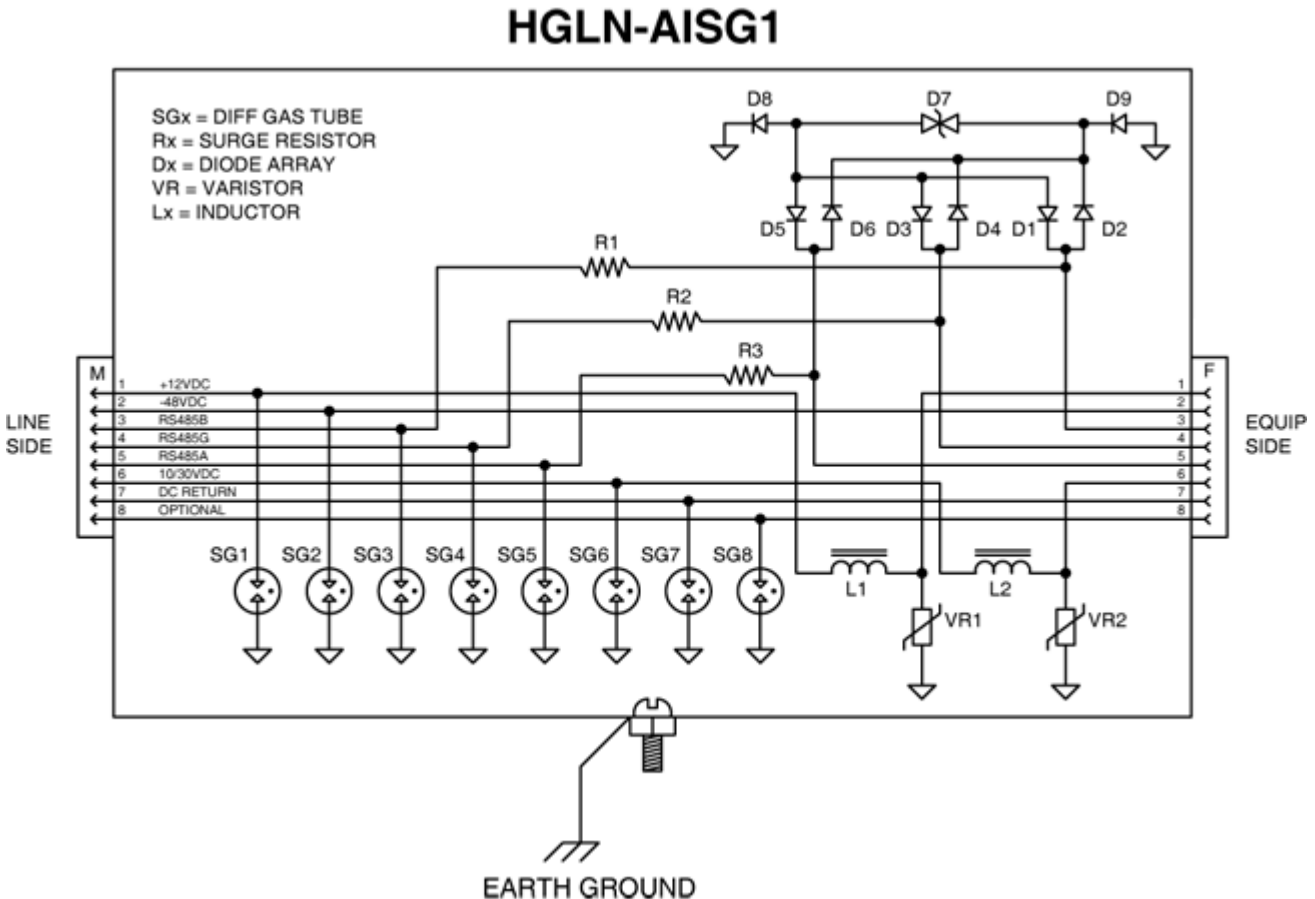
The HGLN-AISG1 is designed to convert into a failsafe mode in the rare case of a catastrophic surge or lightning event. For this mode, the resistors in the second stage will fuse and portions of the diode array will short to ground. This effectively disconnects the line from sensitive equipment thus 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.

AISG Compatible

The HGLN-AISG1 is fully compatible with AISG control lines and connectors. Two 8-pin (1-male and 1-female) connectors are provided. A ground terminal is provided directly on the protector providing superior grounding.

Indoor and Outdoor Use

The HGLN-AISG1 is designed to be used both indoors and outdoors. The unit features a rugged, cast aluminum housing with a gasket seal. The unit's weatherproof construction will ensure reliable operation in the harshest environments. A mast mounting kit is provided for mounting the HGLN-AISG1 to a tower or pole.



Specifications

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| Gas Tube Withstand Voltage | ± 90 volts |
| EIA-485 Stage 1 Withstand Voltage | ± 90 volts |
| EIA-485 Stage 2 Resistance | 3.3 ohms |
| EIA-485 Stage 3 Clamping Voltage | ± 7.5 volts |
| Enclosure Material | Die Cast Aluminum |
| Connectors | (1) 8-Pin AISG Male Connector (1) 8-Pin AISG Female Connector |
| Operating Temperature | -40 C (-40 F) to +80 C (+176 F) |
| Weight | .65 lb. (.29 kg) |
| Dimensions | 43.6 x 2.6 x 1.7 (inches) 117 x 66 x 43 (mm) |