

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

Applications



Description

The AL-CL2-xx series are high performance 3-stage outdoor 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 compact weather resistant housing features a lockable hinged cover and mounting holes are provided on the rear of the enclosure for mounting. The two cable grommets may be adjusted to cable size and are removable.



Specifications

Mechanical Specifications – All Models

Enclosure Material	Polycarbonate
Enclosure Color	Gray
Grounding Lug	(2) 12 AWG Max.
Operating Temperature	-40 C (-40 F) to +80 C (+176 F)
Weight	.40 lb. (.18 kg)
Dimensions	4.75 x 4.06 x 2.81 (inches) 120.6 x 103.1 x 71.3 (mm)
RoHS Compliant	Yes

Electrical Specifications

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



AL-CL2-xx