



G-LINE

Passive, Differential Capacitance Sensor

- ▶ Mounts on barriers ... fences, walls, buildings
- ▶ Adapts to any existing barriers
- ▶ Two zones, one enclosure
- ▶ Zone lengths up to 500 feet
- ▶ Simple, low cost installation
- ▶ Very low nuisance alarm rate
- ▶ All-weather performance
- ▶ Terrain following
- ▶ Relay or multiplex signal outputs

G-Line detects the presence of an intruder by measuring the change in electrical capacitance between the sense wires and electrical ground. As an intruder touches the sense wires, an alarm is generated. The sense wires can be mounted along the top of a fence, along the roof edge of a building, the top of a wall, any place you wish to detect someone attempting to climb.

To minimize unwanted environmental alarms, G-Line operates in a differential mode that is divided into right and left alarm sections. Common mode changes produced by wind, rain, ice, fog, etc. affect both halves equally and cancel at the signal processor. Differential division also permits identification of the specific side from which an attack on the sensor occurs.

Field adjustable sensitivity allows the sensor to detect changes in capacitance as small as 10

G-LINE

“The Climb Stopper”

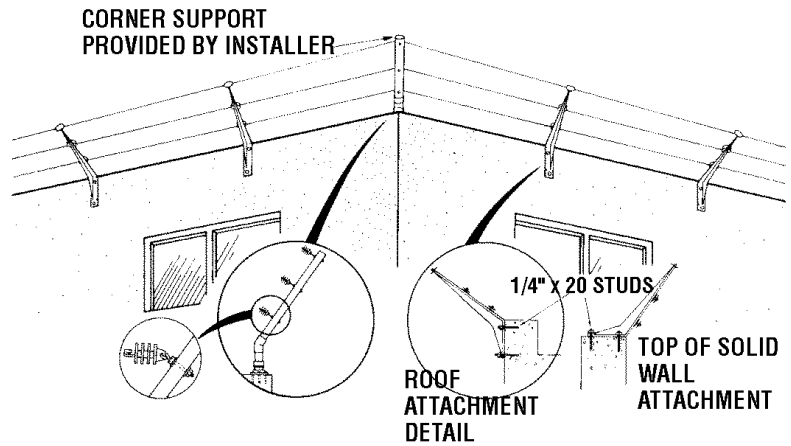


picofarads to as large as 150 picofarads. This lets you tailor the sensor to meet the specific requirements of your site.

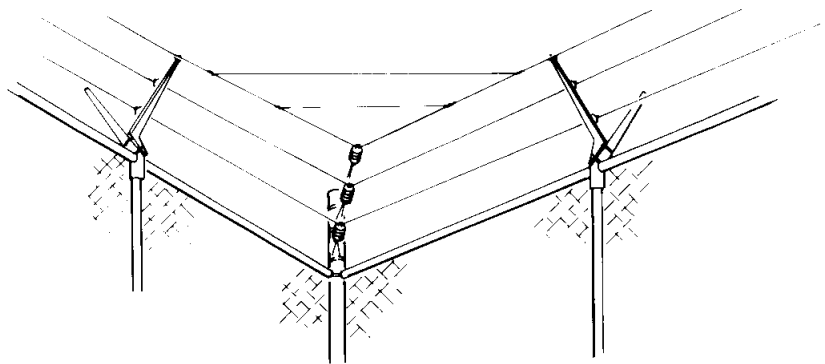
G-Line is available in two models. The GL3-R relay version can be used with any standard alarm control system by means of direct wire connections to the annunciation system. The GL3-M multiplex version, which is fully compatible with the Perimeter Products CEnDe multiplex system, uses a simple two-wire data bus for a complete system.

The polyethylene coated copper clad steel wire furnished is especially designed for this application. The steel provides a means of tensioning the wire, the copper cladding reduces the resistance, and the polyethylene provides a protective coating for the copper. This is especially important in applications that involve salt spray and airborne contaminants. An optional stainless steel wire is also available.

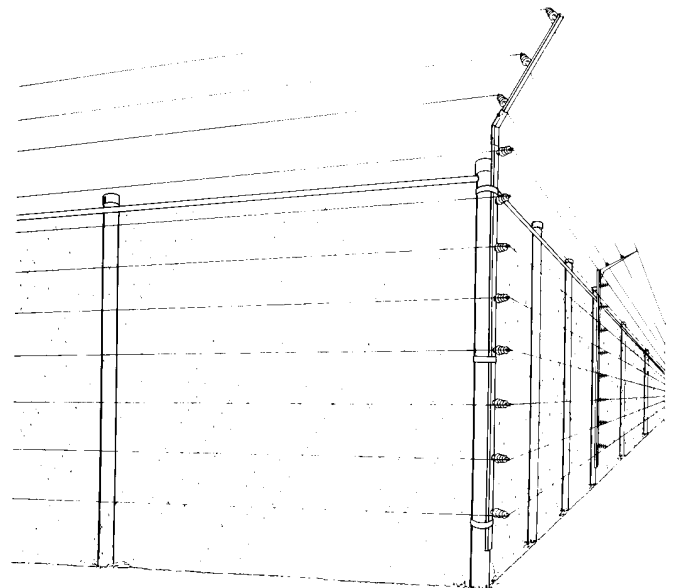
**TYPICAL
ROOF EDGE
INSTALLATION**

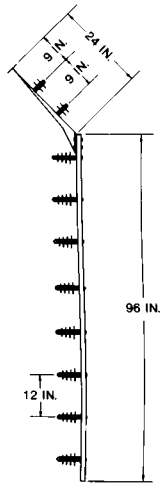


**CORNER
CONNECTION**

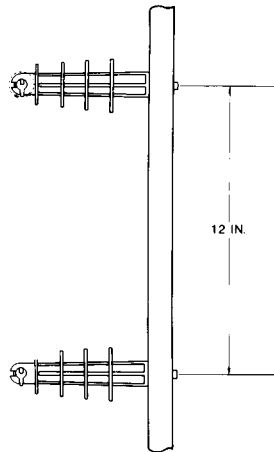


**TYPICAL G-LINE MULTI-WIRE
BARRIER ARRAY OUTSIDE
CORNER APPLICATION**

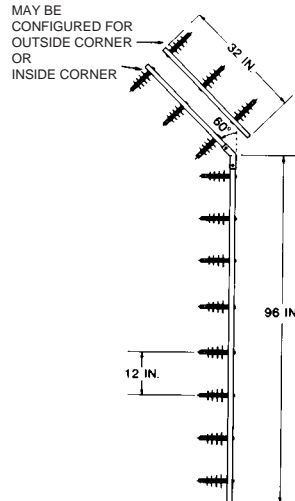




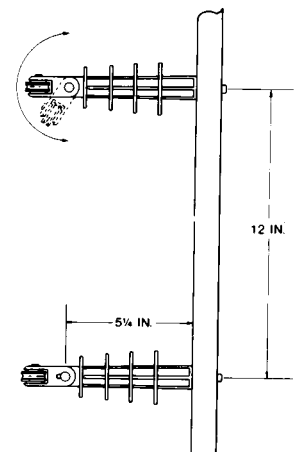
DETAIL
G-LINE MULTI-WIRE
BARRIER ARRAY
STANCHION ASSEMBLY
(not to scale)



DETAIL
G-LINE MULTI-WIRE
BARRIER ARRAY
STANCHION INSULATORS
(not to scale)



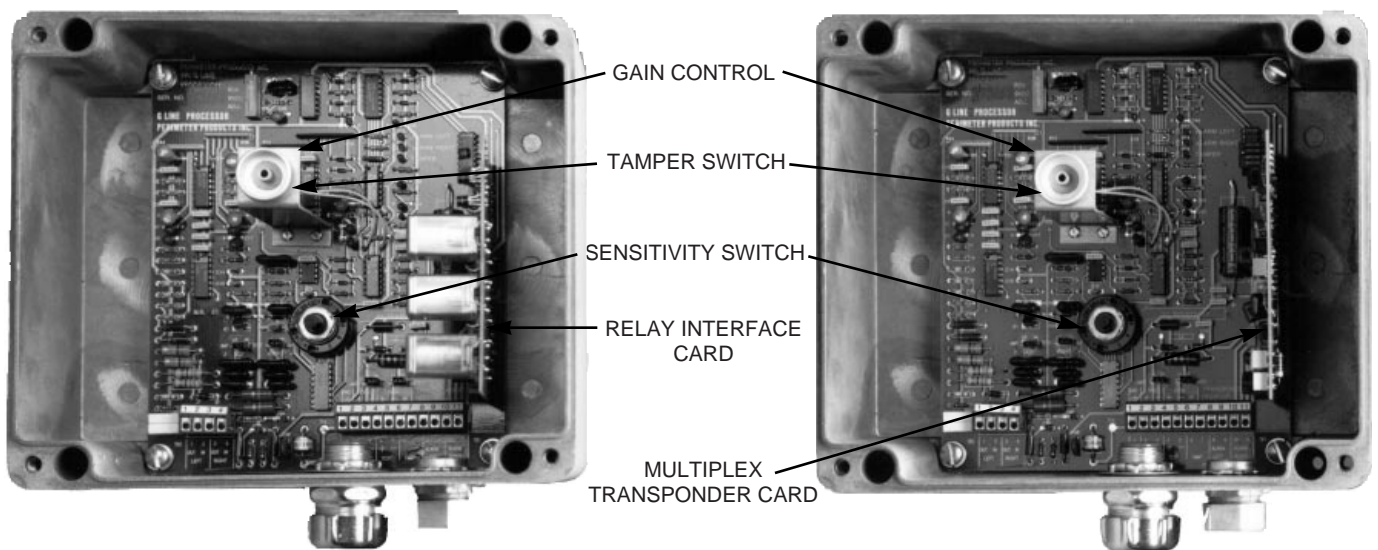
DETAIL
G-LINE MULTI-WIRE
BARRIER ARRAY
CORNER POST ASSEMBLY
(not to scale)



DETAIL
G-LINE MULTI-WIRE
BARRIER ARRAY
CORNER POST ASSEMBLY
INSULATORS
(not to scale)

G-LINE MAJOR FEATURES

- Mounts to existing structures, requires no additional real estate
- Low current, 12 VDC power requirement
- Separate left and right side alarm outputs
- Simple installation - requires no special tools



GL3-R RELAY SIGNAL PROCESSOR

GL3-M MULTIPLEX SIGNAL PROCESSOR

GL3-R RELAY SIGNAL PROCESSOR SPECIFICATIONS

Circuit components	100% solid state with plug-in relay module
Alarm output	Relay interface card features: - Isolated and supervised relay contacts - Normally open or normally closed
Tamper alarm actuation	Activated by either enclosure switch or sense wire fault (cutting)
Tamper output	Relay interface card features: - Isolated and supervised relay contacts - Normally open or normally closed contacts with 1 ampere rating
Remote testing	Built-in self-test generator simulates actual intrusion
Power requirement	+11.0 to 16.0 VDC @ 50 mA max Noise \pm 0.5 Vpp
Weatherproofing	Cast aluminum enclosure - 0.25 inch (6.25 mm) min thickness - All openings gasketed and sealed - Conformal coated circuit boards
Wire entry	- 0.75 inch (1.9 cm) flexible weatherproof conduit fitting for power and alarm lines - 0.5 inch (1.3 cm) E.M.T. compression fitting for sense wires
Connections	Plug-in terminal blocks for both power/alarm and sense wires
Internal controls	Sensitivity-four position switch Gain-internal field adjustable potentiometer
Lightning protection	Input/Output lines protected by gas discharge tubes (90 volts @ 5000 amperes) or transorbs
Operating temperature	-40°C to +70°C (-40°F to +158°F)
Size	23 x 20 x 11 cm (9 x 8 x 4 1/2 inches)
Weight	7.25 lbs (3.25 kg)
Shipping weight	10 lbs (4.5 kg)

GL3-M MULTIPLEX SIGNAL PROCESSOR SPECIFICATIONS

Circuit components	100% solid state with plug-in multiplex transponder board
Alarm output	Multiplex transponder board used in conjunction with CEnDe multiplex system
Tamper alarm actuation	Activated by either enclosure switch or sense wire fault (cutting)
Remote testing	Built-in self-test generator simulates actual intrusion
Power requirement	+12.0 to 16.0 VDC @ 50 mA max Noise +0.5 Vpp
Weatherproofing	Cast aluminum enclosure - 0.25 inch (6.25 mm) min thickness - All openings gasketed and sealed - Conformal coated circuit boards - 0.75 inch (1.9 cm) flexible weatherproof conduit fitting for power and alarm lines - 0.5 inch (1.3 cm) E.M.T. compression fitting for sense wires
Wire entry	Plug-in terminal blocks for power/data test and sense wires
Connections	Sensitivity-four position switch Gain-internal field adjustable potentiometer
Internal controls	Input/Output lines protected by gas discharge tubes (90 volts @ 5000 amperes) or transorbs
Lightning protection	-40°C to +70°C (-40°F to +158°F)
Operating temperature	23 x 20 x 11 cm (9 x 8 x 4 1/2 inches)
Size	7.25 lbs (3.25 kg)
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