



**GROUND DEFENSE SHIELD**

The GDS buried mat - with HS1 precise intrusion detection technology detects and prevents Perimeter Intrusions.

**Defend your problem areas with stealth intrusion technology**

**Rural Application**



**Urban Application**



**Solar Farms**



**Perimeter Protection**



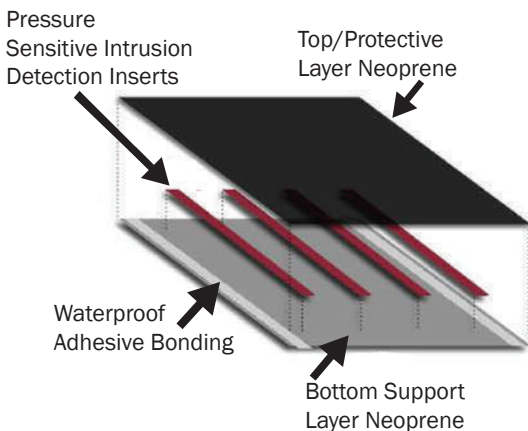
- Pressure sensitive zoned location - stealthy security
- ZERO false alarms due to weather conditions, small animals, birds, etc.
- Ground Defense Shield (GDS) provides precise intrusion detection with up to 40 virtual zones per 2000 foot run
- Ground Defense Shield (GDS) is designed to generate notification based on pressure of over 40 pounds.
- Using the HS1 Controller - communicates with any existing alarm system - generating immediate notifications and activation of multiple timed alarm elements.



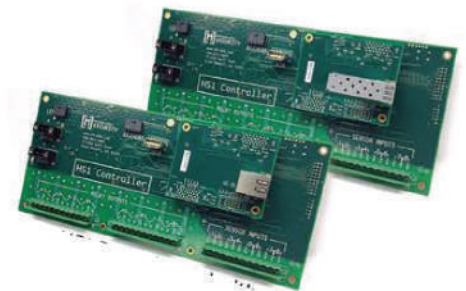
*Upon activation by any intrusion, weighing in excess of 40 pounds, The GDS with HS1 Controller immediately sends notifications to your alarm panel*



**Layered Protection**



- **Waterproof:** redundant water resistant connection and material construction ensure operation under all conditions
- **Tamper-proof:** any attempt to open the HS1 controller, break in the system or interruptions to the power supply generates a message.
- **Batter Back-up:** loss of power to the HS1 controller generates a reoccurring message
- **Warrantied:** 3 year warranty on GDS and HS1 controller



*HS1 Control Board with Ethernet or Fiber Connection (Wifi option available)*



# SPECIFICATIONS

## Protective Neoprene Layer

Material: Polymer

Temperature Range: -40° to 220° F

## Sensor Element

Material: External - PVC

Internal - Conductive Metal Alloy

Temperature Range: -40° to 220° F

Operating Voltage: 32 Vdc/32 Vac Maximum

Operating Current: UL and cUL Recognized

Operating Life: 5 million cycles

## Waterproof Adhesive Bond

Material: Silyl Modified Polymer (SMP)

Temperature Range: -40° to 248° F

- Standard width: 24", 36", 48", 72" (custom available)
- Standard length: 25', 50' (custom available)
- Ultra thin construction
- 40 pound pressure activation
- Intrusion Detection within 50 ft (with HS1 controller)
- Excellent Solution for chain link fence problem areas
- Long distance solution - HS1 controls up to eight, two thousand foot sensor runs

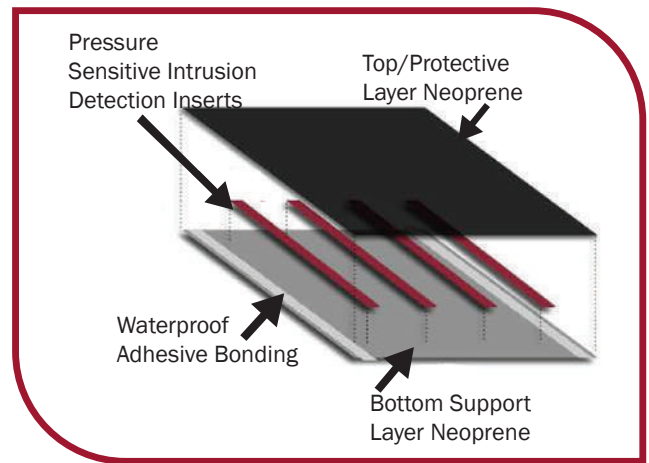
## Directional Intrusion Detection



Sensor Run 1    Sensor Run 2    Sensor Run 3

- Up to 8 Sensor runs can be attached to each HS1 Controller
- Each of the 8 runs may be a maximum of 2000 ft
- Each run can be segmented into a maximum of 40 virtual zones
- Multiple HS1 Controllers can be daisy-chained to protect an expansive perimeter

*NOTE: When installed with three or more sensor runs, and connected with the HS1 controller, the Ground Defense Shield can not only detect the intrusion within 50 feet - but it can advise you of the direction (coming into, or going out of, your facility). Our HS1 controller tells you which sensor run is activated with the first step and which sensor is activated with the second step...thus determining the direction of the intruders path.*



## Buried below NON-ORGANIC MATERIAL:

The GDS is designed to be buried in ground, covered with mulch, DG (decomposed granite), sand, rocks, gravel or any non-organic materials. It is NOT designed to be covered with living materials (grass/plants, etc) as, depending on the depth the GDS is buried, it may inhibit or stop plant growth. Additionally the GDS area should not be an area where digging and/or trenching takes place - while the product is waterproof and acid resistant to ensure long-life, it is not armored and can be penetrated with shovels, picks, hoes and other implements. Any malfunctions caused by penetration, while likely repairable, is not covered by the warranty.

## Simple Installation -



Remove ground cover, smooth and prepare the area for installation

Place the waterproof GDS product, calibrate zones

Replace ground cover and your stealth perimeter security is in place.

## Buried below SYNTHETIC MATERIAL:

The GDS is designed to be placed under material (synthetic turf, synthetic running/walking track, etc). It is designed to handle weight of standard vehicle traffic (automobiles, trucks, SUVs) vehicles weighing more than 2 tons may damage the sensors. Damaged sensors may be repaired but it is not covered by the warranty and all repairs must be done by Perimeter Security to maintain the warranty of the full product.