

# G-MAX - Underground Pressure Detection System (UPDS)

## WHITE PAPER



## **G-MAX - Underground Pressure Detection System (UPDS)**

### **Introduction**

G-Max UPDS provides a unique underground invisible perimeter detection system that can be installed under grass or gravel and alerts when a property is breached.

### **Overview**

UPDS is based on a unique Super Sensor cable which covers the designated area. Mechanical stress on the sensor cable or deformation is converted to electronic signals processed by the digital and analog analyzers in the controller. The controller is designed to create alarms in case of an attempt to breach the perimeter detection by stepping on top of the protected area. It is a unique technology which is far more reliable than video cameras, seismic sensors, infrared sensors, or active RF underground detection devices. It is water resistant, and lasts for many years.

### **SuperSensor Product Facts**

The UPDS treading area alert system is not disturbed by any external interference such as electromagnetic waves, loud noises from speakers, or vibration, and has an extremely low false alarm rate.

UPDS is completely passive, does not interfere with other installed systems and cannot be detected remotely.

UPDS can be installed under gravel or grass and will sound an alarm if someone steps on top of the protected area.

UPDS can be calibrated to distinguish between human movement and a small animal

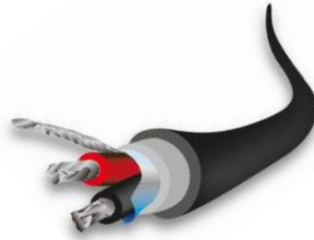
The UPDS sensor cable does not require a dedicated professional staff for repairs and there is no limit for the number of cable repairs

The UPDS can be connected and integrated with many types of home detection systems and command and control software

UPDS uses an advanced and sophisticated signal processing controller with self-learning capabilities that detects the movement, damage, or deformation of the Super Sensor cable and neutralizes false alarms.

**System Advantages**

- Low false alarm rate
- Low maintenance costs
- Designed for medium to high risk installations
- Any attempt to pass over the Sensor Cable-Net will trigger an alarm
- Perfect underground perimeter detection solution for various applications



**System Applications**

- Protection of estates, power stations, underwater pipelines or cables
- The system can be covered by grass, artificial grass or gravel.
- G-Max has consulted with several agronomists to identify the optimum solution to creating a surface area that suits growing grass and plants,
- Gravel is an excellent alternative to mulch, and it is available in a variety of color options for your property. Unlike mulch which must be replaced every year and loses its color after a short period, gravel maintains its colors for many years.

**Product Specifications**

	<b>1GSM016-C</b>	<b>1GSM018-C</b>
<b>Data Communication</b>	Two Channels - HWS controller	Two Channels RS-485 CMS controller
<b>Sensor Net #3SNET003</b>	Up to 120 sqr meters for each detection channel with 20x20 squares	Up to 120 sqr meters for each detection channel with 20x20 squares
<b>Sensor Net #3SNET005</b>	Up to 150 sqr meters for each detection channel with 30x30 squares	Up to 150 sqr meters for each detection channel with 30x30 squares
<b>Power requirement</b>	11-28VDC 30 mA	11-28VDC 50 mA
<b>Alarm Output</b>	Two Relays dry contacts, one for each detection channel	Multiplex Data communication color graphic display with G-MAX4000 software
<b>Signal processing</b>	Adaptive sensitivity	Adaptive sensitivity
<b>Operating temperature</b>	-30°C to 55°C	-30°C to 55°C
<b>Controller Dimensions</b>	13 cm diameter, 9 cm height	13 cm diameter, 9 cm height
<b>Humidity</b>	Up to 100%	Up to 100%
<b>Sealing</b>	IP67 immersed in water	IP67 immersed in water
<b>Test Unit</b>	Computerized test unit Type 1STSU110	Computerized test unit Type 1STSU110