



PRODUCT DESCRIPTION

Sentinel is a new, low cost, Unattended Ground Sensor (UGS) Security System that provides early warning, intrusion detection and threat classification of vehicles and personnel. The system is designed for situational awareness applications ranging from site security and border surveillance to counter drug reconnaissance. The SENTINEL Sensor System is designed to serve the Commercial, Industrial, Law Enforcement and Department of Homeland Security Communities and is available for export to most nations without ITAR restrictions. The SENTINEL Sensor System consists of one SENTINEL Monitor and a set of miniature, highly reliable Seismic-SENTRY sensors that are on guard 24/7 to protect against intruders. The system provides adjustable detection ranges to tailor performance to any environment, an extremely low false alarm rate and two-way RF communications to support wireless programming.

The system is small, lightweight and easily transported. The Seismic-SENTRY Sensors have an integrated seismic transducer which eliminates bulky cable assemblies, allowing for quick and easy deployment. Each Seismic-SENTRY consists of a Seismic Sensor Assembly and VHF Whip Antenna. The Seismic-Sentry houses rechargeable Lithium-Ion batteries that provide a 270 day mission life on a single charge. Battery charging is performed via an industry standard Micro-USB Data/Charging interface that allows the batteries to be charged using any COTS Micro-USB wall or vehicle charger or via a computer using a standard Micro-USB cable.

The SENTINEL Monitor provides the capability to monitor sensor transmissions with an LCD display or to output messages via RS-232 to an optional laptop. It provides the capability to program the required performance variables into each Seismic-SENTRY Sensor wirelessly.



FEATURES

- Small & Lightweight
- Affordable
- Long Mission Life
 - 270 Days @ 1000 Alarms/Day (Sensor)
 - 19 Days (SENTINEL Monitor)
- Flexible Configuration
 - 599 RF Channels
 - 255 Programmable Sensor IDs
 - Target Masking at HHM
- Two-Way RF Communications
 - 138MHz to 153MHz Band
 - Wireless Programming
- Built-in Tests and Alarms
- Anti-Tamper
- Programmable Mission Durations
- Lowest False Alarm Rate
- Software Upgradable
- Simple Operation & Integration into Higher Echelon Platforms

APPLICATIONS

- Site Security
- Intrusion Detection
- Force Protection
- Border Surveillance
- Counter Drug Missions
- National Resource Protection
- Oil Refinery Security
- Anti-Poaching
- Nuclear Power Plant Security



COMPONENTS

Sensor	Description	Detection Range*								
Seismic-SENTRY Sensor	Miniature low cost seismic sensor that provides target class information. Employs a sophisticated algorithm to classify targets as personnel, or vehicles based on seismic target signatures.	<table><tr><th>Target Class</th><th>Range</th></tr><tr><td>Tracked</td><td>0-350 m</td></tr><tr><td>Wheeled</td><td>0-250 m</td></tr><tr><td>Personnel</td><td>0-50 m</td></tr></table>	Target Class	Range	Tracked	0-350 m	Wheeled	0-250 m	Personnel	0-50 m
Target Class	Range									
Tracked	0-350 m									
Wheeled	0-250 m									
Personnel	0-50 m									

**Detection ranges dependent on soil type and conditions*

Monitor	Description	Message Type
SENTINEL Monitor	Provides the capability to monitor sensor transmissions with a LCD display or output messages via RS-232 to an optional laptop. Provides the capability to program the required performance variables into the sensor wirelessly.	Custom

PHYSICAL CHARACTERISTICS

Equipment	Length	Width	Depth	Weight	Batteries
Seismic-SENTRY Sensor	3.25 in	3.0 in	1.65 in	0.5 lbs	Rechargeable Lithium-Ion Batteries
SENTINEL Monitor	6.5 in	4.2 in	2.20 in	1.5 lbs	(4) 9V Lithium Batteries

PERFORMANCE

Suitable for Environments of: -30°C to +71°C for Seismic-SENTRY,
-20°C to +71°C for SENTINEL Monitor

Designed to be Waterproof and Dustproof

Mission Life: 270 Days @ 1000 messages per day (Seismic-SENTRY)
365 Days @ 400 messages per day (Seismic-SENTRY)
19 Days (SENTINEL Monitor)

Target Classifications: Person, Vehicle & Detection

L-3 Communication Systems-East

1 Federal Street

Camden, NJ 08103 USA

Charlene Caputo

Tel: 856-338-2200

Email: charlene.caputo@L-3Com.com

www.L-3com.com/cs-east