# Sense-All

Mobile Tactical Intelligence Solution







## Sense-All

A Turn-Key Intelligence Solution for Military and HLS Applications

### Overview

Due to today's increasingly sophisticated and complex threats, tactical units require autonomous intelligence capabilities – independent of higher echelon activities – that create a unified situational awareness picture enabling immediate, appropriate responses.

In light of this current reality, Elbit Systems EW and SIGINT-Elisra (Elisra) offers Sense-All, a fully customizable, modular, integrated, multi-sensor and multi-mission intelligence solution – for military, HLS and border patrol units – that is easily integrated with any armored or civilian vehicle used in the field.

Sense-All is a turn-key solution combining a unique set of components – selected from a wide array of advanced options – that precisely meets each customer's defined needs. Gathering input from a range of sensors, Sense-All delivers comprehensive, real-time situational awareness of the combat theater – as well as facilitating on-the-spot, independent decision-making and targeting capabilities.

### **Integrated Systems**

With an operational range of up to 30km, Sense-All integrates sensors of any type for use in a wide variety of missions – and can include additional sensors as required.

An integrated communications system – including cellular, satellite or tactical (broadband) elements – enables two-way communications with mission command and other multi-sensor vehicles. When combined with a dedicated data link, Sense-All can also communicate with aerial systems – receiving real-time data and video and transmitting them to ground forces.

The COMINT/DF, Cellular, Radar and Electro-Optics elements can be installed in either a basic or upgraded configuration. All systems can operate simultaneously without interference. Each can be quickly detached and integrated with other Intelligence sources, or used in a man-pack configuration to complete missions in difficult, vehicle-obstructing terrain.

Enabling full vehicle perimeter security, Sense-All includes an onboard surveillance system providing a 360° view of surroundings – and a radar system delivering threat alerts. Functioning in all terrains and environments – military, para-military or civilian – the solution can be easily handled by two operators.



### **Capabilities**

#### COMINT/DF

A lightweight, high-performance, energy-efficient COMINT/DF sensor enables precise interception and direction finding, covering the entire operational frequency band – from 25 to 3000 MHz. Performing wide-spectrum scanning, it detects, locates and monitors signals of interest from selected locations. All components have been extensively field-tested in battle. Easily detached, the sensor can operate independently in the field for several hours in a variety of environmental conditions – including rain and dust.

#### **Cellular - Passive Configuration**

Designed for special operations requiring short- or long-term stealth mode, activities are undetectable by commercial network providers and mobile subscribers. The system maps network towers, intercepts calls & SMS off-the-air, detects and displays suspicious activities, performs direction finding and location of targets, and helps create a comprehensive situational picture using integrated link analysis and map tools.

#### **Cellular - Active Configuration**

This system scans, intercepts, manipulates and monitors GSM, UMTS, and LTE devices; selectively rejects, accepts, denies service and manipulates captured phones, including calls and SMS in real-time.

It extracts identities and determines target locations via direction finding, last-mile homing devices, etc. – without detection by mobile subscribers or network providers. The combination of cellular capabilities and a DF system enables greater precision in pinpointing targets.

#### Radar

A portable, flexible Ground Surveillance Radar (GSR) with a range of up to 24km – with integrated map handling, GPS and a North-finding device – monitors areas of interest, detecting and tracking moving targets. The radar delivers integrated, real-time tactical surveillance, intelligence gathering, and target detection, as well as classification and identification of humans and vehicles. It can be operated as a single unit, in small clusters within complex multi-sensor systems or as part of a comprehensive C4I system.

#### **Electro-Optics**

Sense-All includes advanced, compact and lightweight, ruggedized, erbium-based, Day/Night Electro Optical (EO) sensors. Designed for long and short-range observation, surveillance, and perimeter defense, they integrate eye-safe Laser Range Finders, GPS, long-range zoom Forward-Looking Infrared (FLIR), magnetic compass, target data bank, and extensive video recording capability. They include a high-accuracy electronic goniometer and optional remote control and can interface with complex multi-sensor systems and C4I applications.

### **Vehicle Options**

This turn-key solution includes a vehicle and a suite of sensors, with the choice of vehicle determined by the customer's requirements. The solution can be implemented as a stand-alone system, or on multiple vehicles that work together as a network. Vehicles can work autonomously – as data processing intelligence-units or as front-line information sources – disseminating data to selected recipients, and supplying both an integrated picture of the arena as well as separate views of individual layers.

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### Highlights

- Basic or upgraded configurations of COMINT/DF, Cellular, Radar, Electro-Optic sensors
- Accurate Direction Finding (DF) & location for cellular and tactical bands
- Cellular interception, manipulation, monitoring, selective Denial of Service (DoS)
- Communication monitoring of tactical and cellular bands
- Radar surveillance at any Point of Interest (PoI)
- Visual observation & inspection (Day/Night Cameras)
- Direct HQ contact via wideband communication links, including satellite & cellular
- C4I station for centralized sensor control & data integration
- Man-pack configuration
- Multi-sensor, multi-mission intelligence suite for military & HLS
- · Unified real-time situational awareness of arena
- Autonomous data processing capabilities in the
- Immediate, independent decision-making and targeting
- Turn-key project installed in customer's vehicle of choice
- Customizable, modular, flexible, fully automatic and fully integrated
- Field-proven by military & para-military customers worldwide

