

SigmaCell

A Real-Time Active Cellular Intelligence System for Neutralizing Terrorist and Criminal Threats



Overview

Responding to the escalating use of cellular communications by terrorists and criminals, Sigmabit, an Elbit Systems EW and SIGINT - Elisra subsidiary, developed SigmaCell – a Real-Time Active Cellular Intelligence System. Sigmabit, a tactical off-air system uses the latest technologies for operations in urban, rural, maritime and aerial environments – to help neutralize terrorist and criminal threats around the world.

Highlights

- Detection, Identification, Interception, Manipulation, and Precise Location of Target Devices
- Designed for Military, Law Enforcement, HLS, Intelligence, Border Control, Search and Rescue
- Supports 2G (GSM), 3G (UMTS) and 4G (LTE)
- Fully Compatible with all Mobile Devices, Network Providers and Radio Frequencies Worldwide
- High Sensitivity and Ultra-Fast Scanning for Detection of Multiple Handsets in Large Areas
- Invisible to Users and Service Providers
- Integratable with Elbit Systems' Intelligence, Command and Control, DF and Jamming Systems

SigmaCell

A Real-Time Active Cellular Intelligence System for Neutralizing Terrorist and Criminal Threats

A Comprehensive Mix of Advanced Capabilities

Compatible with all mobile devices, network providers, and radio frequencies, SigmaCell supports 2G, 3G and 4G. It rapidly detects, identifies and exposes target device details (e.g. IMSI, IMEI, MSISDN, GPS, device type) and precisely locates its position. Delivering ultra-fast, long-distance, mass quantity interception, it captures and manipulates target phone calls, messages and data. Combined with Elbit's range of location products, SigmaCell provides a complete end-to-end location solution. Invisible and undetectable, the ruggedized system is customizable to meet military standards and is ideal for covert ops and special missions.

One Versatile Answer for Multiple Scenarios

SigmaCell's extensive capabilities and functionalities allow effective utilization in a variety of environments and scenarios: Fighting Terror and Crime in urban and rural areas | Border Control - capturing smugglers, illegal immigrants, and intruders | Search & Rescue - detecting and locating survivors after disasters | Prisons - Managed Access and control of illegally smuggled phones | Checkpoints, air and seaports, toll roads - detecting and identifying passengers | Sensitive Facilities - protecting security areas from unauthorized individuals | Hostage Situations and neutralizing IEDs.

Technical Specifications

Details	Subject
Technology:	2G (GSM), 3G (UMTS), 4G (LTE-FDD/TDD)
Frequency Bands:	700MHz, 850MHz, 900MHz, 1700MHz, 1800MHz, 1900MHz, 2100MHz, 2600MHz
Software Defined Radio (SDR):	Supported, full control for bands and technology
Intercepted Identifiers:	TMSI, IMSI, IMEI, IMEI-SV, MSISDN
Intercepted Data:	Voice, SMS, Data, CDR
Intercepted Targets Database:	Voice and data stored on removable hard disk, supports data import and export
Voice codec types:	FR, EFR, HR, AMR-NB, AMR-WB
Operating Range:	Configurable, maximal range is controlled by the user
Simultaneous calls:	Unlimited, customizable
Built In Test (BIT):	Supported
Geo-location:	Supported via advanced location engines
Cell Broadcast Service (CBS):	Supported including CMAS, ETWS
Number of mobile networks:	Unlimited, customizable
BTS Configurations:	Unlimited, configurable
Mode of operation:	Random, target



Elbit Systems - Sigabit

16 Helkikei Haor St., High-Tech Park, Beer-Sheva 8470912, Israel
www.elbitsystems.com