

# BORDER SECURITY SOLUTIONS MODULAR MOBILE SURVEILLANCE SYSTEM



ANYTIME. ANY THREAT. ANYWHERE.

WWW.NEXTGENBORDER.COM

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# FULLY OPERATIONAL IN LESS THAN 3 MINUTES

Get eyes on the edge in less than 3 minutes at the press of a button. The Modular Mobile Surveillance System is able to lift a 650 pound payload, powered by the tower skid system, to a height of 33 feet, while self-levelling the payload with a 10 degree incline in any direction.

The payload's modular design supports a variety of camera and radar sensors that can be rapidly installed or replaced based on operational needs.

Our Modular Mobile Surveillance System utilizes two rugged computers to provide superior video processing and expandable storage capacity for 96 hours of recorded information.

Onboard monitors provide a view of a map-based common operating picture and camera video feeds that can be updated from the C2CEN through the integrated communication system.

Encrypted video storage provides quick removal of data into an off-board processing/storage environment once a mission is completed.

FROM THE DARKEST OF NIGHTS
TO THE THICKEST OF BRUSH, OUR
BORDER SOLUTIONS HELP **PREDICT**, **DETECT**, **TRACK**, **IDENTIFY AND CLASSIFY** ITEMS OF INTEREST.



### PERSISTENT SURVEILLANCE

Our sensor suite delivers persistent surveillance with the following:

- Ground-based radar capable of detecting a single person up to 12 km away
- An electro-optical (EO) day camera
- HD IR wide-area surveillance camera
- A long-range laser pointer/illuminator
- An eye-safe laser-range finder

Global Positioning System (GPS) heading receivers ascertain the Modular Mobile Surveillance System location and bearing, relative to True North, with configurations for both urban and rural environments. Either configuration automatically establishes a communication link back to the Border Patrol Command and Control Center by using knowledge of local fixed stations and the current system position/bearing.

#### 01. URBAN

Our LTE High-Performance Multi-Network Vehicle Router with dual radios and 2 SIM card slots, supports Verizon, AT&T, T-Mobile, Sprint, and FirstNet Band 14.





#### 02. RURAL

Our Tactical Wireless Mesh Network Radio offers data communication at distances of up to 20 miles using mesh network technologies.

# RUGGED MOBILE SURVEILLANCE. PROVEN COMMAND & CONTROL.

Reliable information is often a matter of life or death. Elbit Systems of America creates a single operating picture for U.S. Customs and Border Patrol agents. We handle the data, so agents can **virtually be anywhere** along the U.S. border.

Our Modular Mobile Surveillance System gives border protection agencies a means to provide enhanced surveillance coverage on a rugged, mobile vehicle to observe areas of interests based on border crossing trends and intelligence. The Command and Control Center (C2CEN) can use radar generated tracks to investigate detections with fixed EO/IR resources. The C2CEN can also take control of the sensor payload in order to guide and direct to specific items of interest.







## TORC2H®

Our Modular Mobile Surveillance System utilizes the powerful TORC2H® command and control/common operating picture software, which along with the vehicles communication system, allows information sharing between Border Patrol Station Command and Control Centers and other Modular Mobile Surveillance System vehicles to collaborate in surveilling the border and resolving incidents.

Interoperability between fixed towers and the Modular Mobile Surveillance System, provided by TORC2H®, creates an integrated Situational Awareness Fused Environment (SAFE<sup>TM</sup>). The TORC2H software also enables modularity for sensor payloads by providing the capability to quickly reconfigure sensors suites to support a variety of missions.







#### **PRODUCT SPECIFICATIONS**

Road conditions - 40 mph on rough terrain

PRODUCT SPECIFICATIONS	
Vehicle type/model	F250
Milestone recording time capacity/time	8 TB/96 hours
Communications	Cellular/LMR
Testing	MIL-STD-810G
Sensor Payload Specifications	
EO/IR Sensor Payload Resolution	1280 X 1020 - HD
Backhaul capability range	32 Km (20 miles)
Radar auto classification of humans/animal/vehicle at:	Humans - 12 Km (7.5 miles)
	Animals - 12 Km (7.5 miles)
	Vehicle - 21 Km (13 miles)
/\$2 -00 11111511111/0	Large vehicles - 32 Km (20 miles)
Illuminator	Yes
Laser range finder	Yes
Sensor modularity - accepts HD or SD including most RVSS sensors	Yes
Sensor replacement time EO/IR (in minutes)	15
Heat haze mitigation module	Yes
Silant Mada anavatiana	
Silent Mode operations  Silent mode operations capability with full sensor suite (in hours)	5.9
Silent mode operations capability with EO/IR only (in hours)	7.9
Stability	
Sensor payload stability	EO/IR electronic stabilization and gyro stabilization
Detection capability humans with bundles and long arms	12 Km (7.5 miles)
Stability Accuracy at 7.5 miles (in uRad)	< 80
Radar Specifications	
Radar removal/installation time (in minutes)	15
Radar scanning mode in azymouth (in degrees)	360° -33° to +22°
Radar scanning mode in elevation (in degrees)  Rugged radar gimbal - remains installed on tower during transit	-53 10 +22 Yes
	163
Tower Specifications	
Tower height from ground including sensors (In feet)	37
Leveling capability (3 axis)	± 10°
Leveling accuracy (3 axis)	0.1°
Sled installation/removal (in minutes)	20
Sled self contained	Yes
Shock absorbing cradle for sensor payload	Yes
Height above cab in stowed position (in inches)	9
Sled weight including sensors (in lbs)	1867
Full tower deployment - ready for operation (in minutes)	3.5
Back up battery capacity/technology (for silent-mode operations)	9.6 KW/Lithium
Environmental	
Capable of operating in wind conditions (mph)	70
Operational temperature conditions	-10° to 140° F
Normal wind conditions (mph)	10 to 20

Yes

## YOUR FUTURE OUR LEGACY

Elbit Systems

of America

Our legacy in providing integrated surviellance along the U.S. border demonstrates the ability to fuse a diverse set of sensors and systems, providing a common operating picture in both fixed and mobile operations. Our Integrated Fixed Tower system is tested, certified, and operational along the U.S. southern border and provides long-range, 360-degree surveillance persistent capability.

Elbit Systems of America, LLC is a U.S.-based wholly owned subsidiary of Elbit Systems Ltd., a leading global source of innovative, technology based systems for diverse defense and commercial applications.



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