

# ThermoVision® RANGER™

## APPLICATIONS

- Coastal Surveillance
- Border Patrol
- Force Protection
- Training Range
- Fire Control
- Drug Interdiction
- Perimeter Security
- Customs Inspection
- Vessel Traffic Monitoring System

## LONG RANGE SURVEILLANCE SYSTEM

ThermoVision Ranger provides unparalleled long-range thermal imaging performance in a ruggedized, weatherproof package. Optimized for integration into a wide range of mobile systems, and field installations, Ranger delivers stunning, crisp, clear images — even from multi-kilometer ranges. Nothing maximizes your tactical advantage in standoff situations like Ranger.

**ID VEHICLES AT 9 KM.** Perform long-range reconnaissance, surveillance, and target acquisition with unparalleled viewing power — safely and completely undetected. Track vehicles in excess of 9 km, with detailed recognition out to 3 km. Targets are visible through smoke, dust, battlefield obscurants and poor weather conditions. It's all enabled by Ranger's state-of-the-art, third generation Indium Antimonide (InSb) focal plane array (FPA) and dual FOV 100/500mm telescope.

### MULTIPLE CONFIGURATIONS

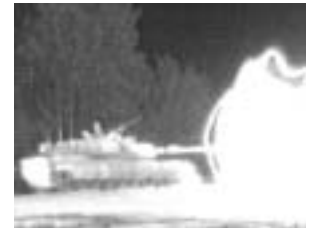
Ranger's four configurations provide easily tailored and quickly integrated solutions for use in a broad range of surveillance missions. Basic Ranger systems include a thermal imager housed in an environmentally sealed enclosure with ergonomic hand controller. Enhanced Ranger systems add digital pan and tilt and on screen symbology.

**MIL-STD-810E QUALIFIED.** Ranger is equally at home in the desert, on the open seas, or deep in the jungle. MIL-STD-810E qualified, it readily withstands weather extremes, dust, sand, water, and salt-water corrosion. Day after day, year after year.

### EASY INTEGRATION VIA RS-232 PORT.

Ranger was designed for easy integration — both physically and electronically — into a complete range of mobile systems, vehicles, and platforms. The system's small size and mounting flexibility make it easy to design-in, and its serial RS-232 interface provides a gateway for seamless integration into your existing computerized systems.

**BACKED BY THE FLIR NAME.** FLIR is the world's leading supplier of advanced infrared imaging systems for military, government, and law enforcement applications. With a global network of service and training centers, you're assured the experience, resources, and customer commitment you demand.



### MODEL SPECIFICATIONS

	BRS	BRSX	ERS	ERSX	
50/250 mm lens	●		●		● Includes thermal imager and ergonomic hand controller
100/500 mm lens		●		●	
Pan Tilt Unit			●	●	● Digital pan and tilt, proportional joystick controller, pre-programmable auto scan. On screen symbology for: azimuth, elevation, time, date, 2nd function and auto leveling
Proportional Joystick			●	●	
Auto Scan			●	●	
On Screen Symbology			●	●	

### SYSTEM SPECIFICATIONS

Video Format	RS-170 or CCIR compatible
Serial Interface	RS-232 (RS-422 optional)
Power Requirements	8 - 32 VDC
Heaters (Optional)	80W
Environmental Qualifications	Fully ruggedized/Mil-STD-810E qualified for field operations
Operating Temperature Range	-32°C to +55°C (-26°F to +131°F)
Camera Controls	On/Standby/Off, Auto & manual Level, manual Gain, Polarity, reticle on/off/select, Non-Uniformity Correction, Change FOV, Focus
Mounting	¼-20 Threaded Base Plate
Dimensions	22.0" long x 6.5" diameter
Weight	22 lbs

### THERMAL IMAGER

Detector	256 x 256 Indium Antimonide (InSb) FPA	
Spectral band	3-5 μm	
Optics	f/4.0	
Field of View	<b>BRS, ERS</b>	<b>BRSX, ERSX</b>
WFOV	50mm, 9° x 7°	100 mm, 4.5° x 3.5°
NFOV	250mm, 1.8° x 1.6°	500 mm, 0.9° x 0.8°
FOV Switching time	<2 seconds	
FPA Cooling	Closed-Cycle Stirling	
Thermal Sensitivity	0.025°C @ 23.0°C	

### ACCESSORIES

Storage/Transport Case	Hard shell, lockable with fitted foam insert
AC Adapter	110VAC / 220VAC power supply
Break Out Box	Provides video, power and hand controller interface
Hand Controller	Ergonomic design, controls all system functions
System Cable	25' long molded connectors
Power Supply Cable	6' long molded connectors

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