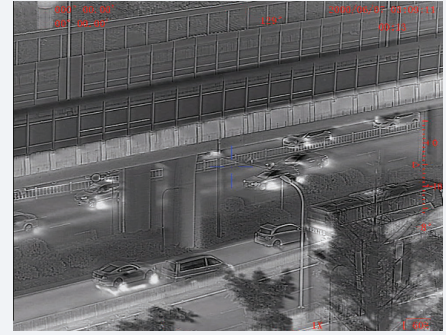


SENTINEL LRF (640)

Multi-Functional LONG RANGE THERMAL BINOCULAR



Display

SENTINEL LRF (640) – Military-Grade Long-Range Thermal Binocular

The SENTINEL LRF (640) is a rugged, mission-ready thermal imaging binocular engineered for military operations, including reconnaissance, target acquisition, surveillance, and force protection. Designed to perform in the most demanding environments, it offers:

- High-resolution uncooled thermal sensor for reliable detection of personnel, vehicles, and equipment through smoke, fog, dust, and camouflage—day or night.
- Integrated eye-safe laser rangefinder with a standard range of 5,000 meters and an optional extended range of up to 10,000 meters for precise target distance measurement across vast operational zones.
- Digital magnetic compass (DMC) for accurate azimuth and inclination data—essential for target location, fire correction, and coordinated mission execution.
- All-weather, 24/7 capability, enabling consistent performance in low-visibility or denied environments.

The SENTINEL LRF (640) enhances situational awareness and operational effectiveness, providing armed forces with a force-multiplying advantage in tactical and strategic scenarios.

Infrared sensors	
Detector type	Vox
Resolution (pixels)	640 x 512
Spectrum (µm)	8-14
Pitch size (µm)	12
NETD (mK) @F1.0	<40
Frequency (Hz)	9
Objective Focal Length (mm)	50 @F1.0
Field of View (°)	8.8 x 7.0
Non-uniformity correction	Auto
Detection/Recognition of tank target (km)	6.3/1.6
Detection/ Recognition of human target (km)	2.3/0.6
Zoom	1-4x
LRF	
Laser type	Semiconductor laser, Class I
Laser wavelength (µm)	1,550
Detection range (m)	20 - 5,000, (20 - 10,000 Optional)
Ranging accuracy (m)	±2
GPS	
Type	GPS, Galileo (GNSS)
Target locating error	±5M (target<1km)
Format	Lat/Long and MGRS

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Magnetic compass	
Azimuth resolution/accuracy	1° / 1°
Elevation resolution/accuracy	1° / 1°
Elevation range	+/- 80°
Mechanics and environmental	
Interpupillary distance (mm)	64
Eyeiece diopter adjustment (dpt)	±5
Internal video & photo recording	Yes
Connectivity	Power input, RS232 (remote control), USB (output videos and images), PAL video
Continuous working time (hours)	4
Dimensions with eyepiece (mm)	160 x 200 x 83
Weight without battery (kg)	1.45
Power	Internal battery: rechargeable 4x18650, DC power supply 12VDC
Temperature range (°C)	-30 to +60
Storage temperature range (°C)	-35 to +65
Waterproof	MIL STD 810 (1m for 30 min)
Mechanical interface/mounts	1/4" tripod mount

DELIVERY SET

Supplied with the following standard accessories:

- Soft carrying case
- 4x 18650 batteries
- Li-ion battery USB charger
- Hard carrying case
- Operation manual
- Multi-use cable

