

IRTAS M36

The Infrared Target Acquisition Sight (IRTAS) M36 is designed as a “drop-in” replacement for existing Legacy M36 and other sighting systems. With improved capability in nighttime imaging, degraded daytime weather conditions, and battlefield obscurants, this proven system improves our troops’ ability to detect, identify, and destroy threats from much longer ranges than ever before. The upgraded thermal sight is based on CE’s NightConqueror high-performance imager selected as the imager of choice for new platforms and as an upgrade to many existing legacy vehicles.



BENEFITS

- High resolution, mid wave InSb sensor offers industry-leading image quality
- Reduced size and weight makes the IRTAS M36 drop-in compatible with virtually all one and two-man turrets
- Auto focus, and two optimized fields of view coupled with e-zoom enable warfighters to detect, target, and destroy targets more effectively than ever
- L-3’s patented image enhancement processing enables the gunner to discriminate the target from background & clutter at longer ranges
- Superior ruggedization extends operational life – even in the harshest environments – improving availability and reducing total life cycle costs
- Detachable sensor telescope translates to reduced repair times in the battlefield while maintaining precise boresighting for weapon accuracy
- Laser protection for both day sight and direct view – compliant with military standards



IRTAS M36

M36 THERMAL SIGHT UPGRADE

CAMERA SYSTEM PARAMETERS

Sensor Type: MWIR InSb Reticulated
Sensor Size: 640 x 512 Pixels, 20 μ m Pitch
Cold Shield: f/4
Spectral Band: 3.6-5.0 μ m with CO₂ Notch
System Control: RS-422
Video Format: RS-170A

LENS PARAMETERS

F/Number: 4.0
Dual Field of View
Effective Focal Length:
Wide FOV: 70 mm (10.5° x 7.9°)
Narrow FOV: 210 mm (3.5° x 2.6°)
Electronic Zoom1: (2X) WFOV 140mm
Electronic Zoom2: (2X)NFOV 420mm (1.8°x1.3°)
FOV Change Time: < .75 sec.

POWER REQUIREMENTS

Power Source: 16-40 VDC
Power at Steady State: < 60 Watts

MECHANICAL / ENVIRONMENTAL

Weight: 42 lbs.
Size (inches): 16.0 L x 18.6 H x 6.8 W
Operating Temperature: -40°C to 62°C

TYPICAL PERFORMANCE

Cool-Down Time: 4 Minutes Typical

OPTICAL SPECIFICATIONS

Unity Window
Magnification: 1.0X
Vertical Field of View
Elevation: 60 Degrees
Depression: -20 Degrees
Day Sighting
Magnification Power: 7.0X
Field of View (Circular): 10.0 Degrees

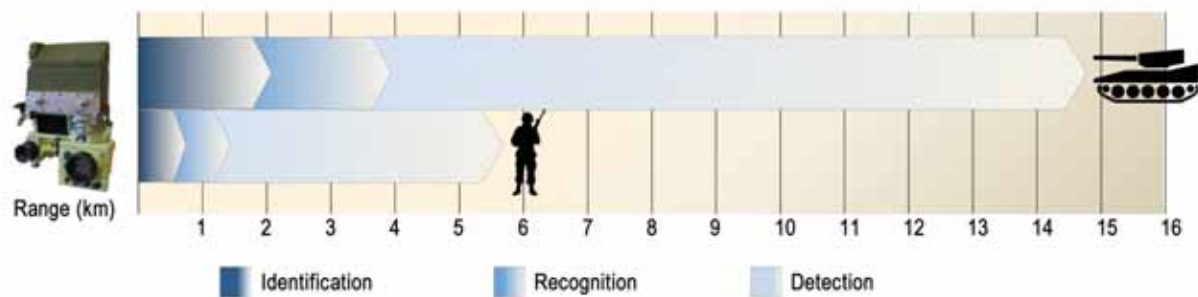
RANGEFINDING (OPTIONAL)

Maximum Range: 5000m
Minimum Range: 200m
Range Accuracy: \pm 5m
Logic: First or Last Pulse

FEATURES AND CAPABILITIES

The IRTAS M36 Thermal Sight Upgrade provides many advanced features including:

- Remote Video Output
- Local Area Processing
- Auto Focus
- Electronic Stabilization
- Electronic Zoom
- Threshold Based Averaging
- Adaptive Temporal Noise Reduction
- Extended Dynamic Range
- Target Tracking (additional hardware required)



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