

SPEED-MR HD

Automatic Detection and Surveillance Systems



The SPEED-MR-HD is a robust, mid-range electro-optical system designed for continuous surveillance and target acquisition in both stationary and deployable missions.

It features HD thermal and day cameras, a SWIR sensor, and a laser rangefinder, delivering clear, high-quality imaging in all conditions.

With embedded edge AI, advanced tracking algorithms, and a **modular architecture** that allows fast component replacement, it ensures high performance with minimal downtime.

The system is platform-agnostic, easily integrating into a wide range of defense and security architectures. With thousands of operational hours worldwide, the SPEED-MR-HD is a proven, adaptable solution for critical surveillance operations.

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Electro-Mechanical

Field of Regard: Elevation: -45° to +67°
 Azimuth: 360°*N continuous
 Angular Velocity: AZ=60°, EL=30° sec

HD Thermal Imaging (TI) Sensor

Sensor Type: MWIR XBn HD
 Spectral Range: 3-5 μm
 Sensor / System: 1280 x 1024
 Resolution: 450mm: Continuous Optical Zoom Lens x22
 Field of View: Digital zoom X2 (Optional X4)
 1.6° (NFOV) - 35° (WFOV)

Daylight Channel

Sensor Type: 1/2.8" High res. color CMOS
 Lens: Optical zoom X30, Digital zoom up to x4
 Sensor Resolution: 1920 X 1080 HD
 System Resolution: 1280 X 1024
 System Field of View: 1.6° (NFOV) - 43° (WFOV)

SWIR Spotter

Sensor Type: Staring Array InGAs, Digital
 Spectral Range: 0.9-1.7 μm
 Sensor Resolution: 640x512
 System Resolution: 1280 X 1024
 System Fields of view: 0.9° (600mm focal length)

Laser Rangefinder (optional)

Type: Eyesafe, Class 1
 Wavelength: 1.54 μm
 Range: Up to 20 Km

Physical Characteristics

Weight: <40kg with sensors

Electrical Interface

Voltage: 220V AC / 28V DC
 Power Consumption: <500W

Environmental Conditions

Temperature: -15° to 55° C (optional -32° to + 60°)
 Humidity: Up to 95% (non-condensing)



<40kg



Radar



GPS



Control Unit



Command & Control Systems

Features

Target Acquisition
 Automatic Detection
 Multi-Spectral Imaging
 Advanced Image Processing
 Advanced Map Engine
 High Line of Sight (LOS) Stabilization

Optional

Eyesafe Laser Range Finder (LRF)
 Control & Display Unit (CDU)
 Digital Video Recorder (DVR)
 GPS Compass
 Laser Pointer
 Panoramic Scanning

Image Processing

Local and Global AGC
 Advanced Video Enhancement
 ATR- Auto Target Recognition
 (optional AI capabilities)
 VMD- Video Motion Detection
 Advanced ground, maritime & aerial
 target tracker
 ATIR- Anti Turbulence Image
 Recognition
 Pseudo Color TI