

HEVI

OPTRONICS

ELECTRO-OPTICAL SYSTEMS



HeviTrack-S

Medium range multi-sensor reconnaissance, surveillance and target aquisition (RSTA) system for armoured vehicles, unmanned ground vehicles, patrol vehicles and stationary applications.

HeviTrack S is a rugged electro-optical system for day and night observation applications. The HeviTrack is designed to have a field swappable sensor module for various use cases. In standard configuration it provides clear video feed from a 4K EO sensor along with a compact MWIR sensor and optional laser rangefinder. The sensor module windows are optionally equipped with de-icing heaters and a cleaning system for extended operation in adverse weather conditions.

The onboard real-time video processor provides image enhancement of all sensors, image fusion of daylight and infrared cameras into a single video stream, image stabilization, scene steering and target tracking. Compact design and fully digital interface allows for a cost-effective integration for many platforms.

PLATFORMS

- Armoured Vehicles
- Light Combat Vehicles
- Unmanned Ground Vehicles
- Stationary Surveillance Masts and Structures

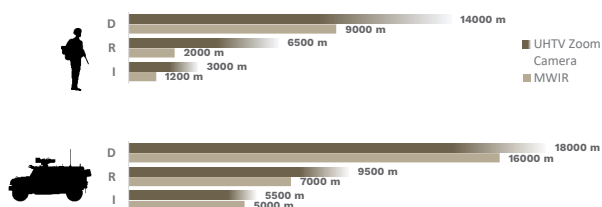
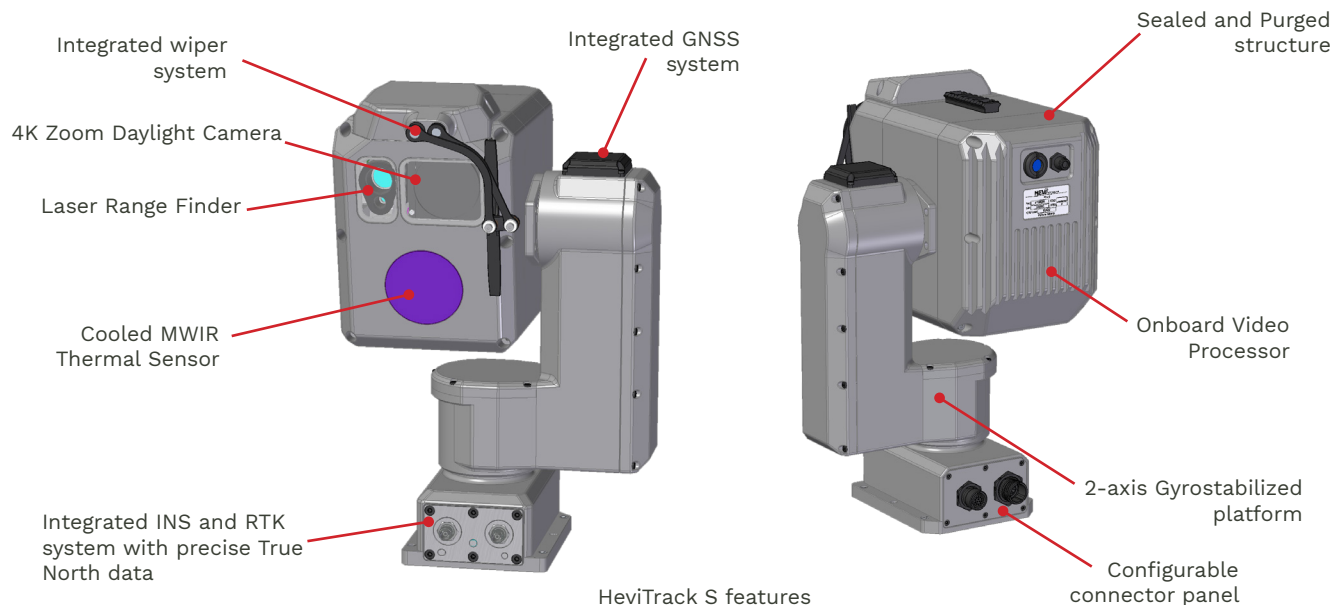
APPLICATIONS

- Situational awareness
- Force protection
- Targeting and reconnaissance
- Forward observer

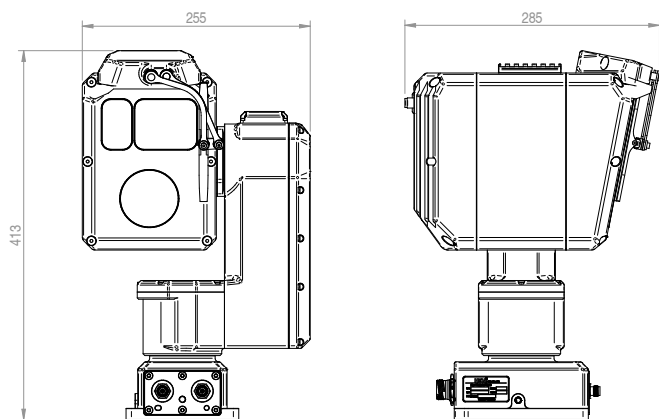
KEY FEATURES

- Integrated panoramic daylight EO, MWIR and LRF capability with high-accuracy boresighted optronic assembly
- Gyrostabilized 2-axis system
- Rugged according to MIL-STDs
- Easy integration into vehicles
- Continuous 360 azimuth movement, -45° to +95° elevation range
- Integrated Electronics and onboard video processor
- Designed to be compatible with NATO Generic Vehicle Architecture (GVA)

HeviTrack S Specifications



Dedicated Control Grip and Mission Display



HeviTrack S dimensions

GENERAL CHARACTERISTICS OF STABILIZED ASSEMBLY:

Azimuth Range	360° continuous rotation
Elevation Range	-45° to +95°
Stabilization	≤ 500 μrad
Slew rate	90°/sec
Type	2-axis stabilized
Vibration Damping	Internal 6-DOF Vibration Damping

THERMAL IMAGER:

Spectral Response	3 – 5 μm (MWIR)
Sensor Resolution	640 x 512 px
FOV	28°-1.9° HFOV 14X optical zoom, 4X digital zoom

UHD TV ZOOM CAMERA:

Spectral Response	430nm – 680nm 680nm – 920nm (NIR)
Sensor	2160p/60 (QFHD)
FOV	58° to 2.3° (Optical Zoom in UHD) (0.3° with Digital Zoom (480p))
Features	Visibility Enhancer, Defog, Noise Reduction, Image stabilization, Auto ICR, White Balance modes

LASER RANGE FINDER:

Wavelength	1550 nm
Safety Class	Class 1 (eye safety per IEC 60825-1)
Maximum Range	6500 m, 2.3 x 2.3 m target size
Range accuracy (1 σ)	±1 m

ENVIRONMENTAL CONDITIONS: (Designed to be compatible)

Environmental	Sensor module sealed to IP67 (Nitrogen purged) /MIL-STD-810H
Electrical	MIL-STD-1275 DEF-STAN 61-5
Operating temperature	- 25° to +55°C
Mechanical Protection	Aluminium housing - Collision with a branch at 20km/h

VIDEO PROCESSOR FEATURES:

Image stabilization
Target / position tracking
Image processing and enhancement
Target geolocation
AI features ready

PHYSICAL AND ELECTRICAL CHARACTERISTICS

Mass	11.0 kg
Dimensions	400 H x 255 W
Input Voltage	9-36 VDC
Power Consumption	50 W, average
Control and Video Interface	Gigabit Ethernet

OTHER FEATURES:

Integrated Dual Antenna GNSS-Aided INS (Optional)
Window cleaning system
De-icing windows heating system
Turn-Key solution available (Includes control grip and video monitor)
Stationary surveillance mounts available (masts, tripods, rooftop solutions)