CONTROP

SPEED-LR

Long-Range EO/IR System for Land Surveillance

The SPEED-LR is a rugged, battle-proven electro-optical system built for 24/7/365 operation in the harshest environments. Designed for fixed and mobile platforms, it delivers long-range, high-clarity surveillance with a suite of HD thermal, daylight, and SWIR sensors—enabling clear imaging through fog, haze, smoke, rain, and glass.

Powered by embedded AI, an advanced video enhancement and tracking algorithm for air, sea and land targets, SPEED-LR enables fast and reliable detection, recognition, and identification (DRI) across complex terrain and operational scenarios.

The system is C-UAS compatible, fully interoperable, and platform-agnostic—seamlessly integrating into existing command-and-control architectures for layered defense operations.

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Electro-Mechanical

Field of Regard:	Elevation:	-45° to +73°
	Azimuth:	360°×N continuous

Cutting Edge LOS Stabilization

HD Thermal Imaging (TI) Sensor

Sensor Type:	HD, XBN
Spectral Range:	3 - 5 µm
Sensor / System Resolution:	1280 x 1024 pixels
Field of View:	1.25° - 30°, 590mm Focal Length
Lens:	Continuous Optical Zoom Lens x24, Digital zoom X2 X4
Focus:	Focus to infinity, Focus to Distance (optional)

Daylight Channel

Sensor Type:	1/1.9" High res. color CMOS
Sensor Resolution:	1920 X 1080 HD
System Resolution:	1280 X 1024
Field of View:	1.7° - 36° (216 mm Focal Length)
Lens:	Zoom x30, Digital zoom X 32
Focus:	Autofocus

SWIR Channel

Sensor Type:	Staring Array InGAs, Digital
Spectral Range:	0.9-1.7 µm
Sensor Resolution:	640x512
System Resolution:	1280 X 1024
Field of View:	0.3°-1.25°, 1900mm Focal Length
Lens:	Continuous Optical Zoom Lens x4.75, Digital zoom X2 X4

Laser Rangefinder

Type:	LRF Combined
LRF:	Eye safe, Class 1
Wavelength:	1.54 µm
Range:	Up to 20 Km

Laser Pointer

Type:	Laser Pointer
Pointer:	Class 3B
Wavelength:	854 nm

Physical Characteristics

Payload Weight:	37kg
Gimbal Weight:	32kg

Electrical Interface

Voltage:	220 VAC or 48VDC
Power Consumption:	450 Watt (nominal)
Video Outputs:	MPEG-TS OVER UDP (H.264 Comprassed)

Environmental Conditions

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

<70 kg

Integrated into command & control systems

Control Unit

Integrated LRF and Pointer

Features

Advanced Image Processing
Primary & Secondary Channels Continuous Recording
Quick Integration Using SDK Software
Target Acquisition and Tracking
Advanced Map Engine
High MTBF
Panoramic Image for regional orientation
Radar / Sensors connectivity – Slew to Cue
Suitable for modular use, Stand alone,
Networked or fully integrated in C2 systems
Laser illuminator - Optional
GPS - Optional

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