

GÜCÜNÜ BİLGİDEN ALIR



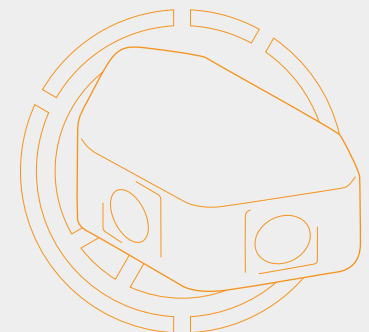
Lightweight
Low Power



Electro Optic
Systems

DVSF⁴⁰

ALTAY INFRARED CAMERA AND
LLTV FUSION SYSTEM





GENERAL

- Infrared Camera and LLTV Fusion System
- Situational awareness for combat, tactical-wheeled vehicles, armored security vehicles, and standard security vehicles
- Improves survivability and mission capability by providing drivers with wider fields of view as well as the elimination of blind spots to safely navigate through dust, sand, haze, smoke, light fog and the blackest night
- Ability to see both sides of the road
- High range performance
- Advance image processing algorithms
- Low power consumption
- Compact size
- Low weight

DVSF⁴⁰ ALTAY Infrared Camera and LLTV Fusion System

APPLICATION

- Military Vehicles (main battle tanks, armored combat vehicles, infantry fighting vehicles, ...etc.)



SPECIFICATIONS

Detectors

Detector Type	Uncooled microbolometer
Detector Material	ASi
Detector Pitch	17 μm x 17 μm
Spectral Band	8 μm to 14 μm
Resolution	640 (Horizontal) x 480 (Vertical)
Sensitivity (f#1.0, 300 K)	< 50 mK (for 17 μm x 17 μm)

Optical Interface

Effective Focal Length (EFL)	14.25 mm ($\pm 5\%$)
FOV (Horizontal)	44° ($\pm 5\%$) (for 17 μm x 17 μm)
f/#	1.2 ($\pm 5\%$)
Focus Type	Fixed focus, Athermalized
Focus Range	0.6 m to infinity

Mechanical Interface

Dimensions (without accessories)	103 mm x 58 mm x 170 mm (± 10)
Weight (without accessories)	550 gr (± 10)

Imaging Performance

Frame Rate	25 Hz [CCIR (PAL)]
Time-to-image	< 2 sec
Digital Zoom	X1, X2, X4
Noise Cancellation	Adaptive Temporal and Spatial Noise Cancellation
Detail Enhancement	Edge Aware Adaptive Digital Detail Enhancement
Image Enhancement	Plateau-based Adaptive Histogram Equalization / Linear / Manual
Color Palette	Up to 8 different palettes
Live Calibration	Periodically or on demand

Interfaces

Connector	MIL-DTL-38999, Series 3
Communication	RS-232
Power	MIL-STD-1275E compatible
Power Input Voltage	24 V
Maximum Power Consumption	5 W (Typically 1.5 W - 2 W)
Digital Video Output	Parallel Video 1.8 V LVCMOS (8-bit data, vsync, hsync, pixclk), Ethernet (Optional)
Analog Video Output	CCIR (PAL)
GPIO	8 pins 1.8 V LVCMOS (Configurable with respect to customer requirements)
External Trigger	Yes (controlled with 1 GPIO)

LLTV Technical Specifications

Image Sensor	CMOS
Wavelength	400-110 nm (visible+near-infrared)
Viewing Angle	It will cover the perspective of the thermal camera and will provide a minimum requirement of 51.3° \pm 5 % horizontally.
Display	Analogue (PAL)
Resolution	At least 1024 (horizontal) x 768 (vertical) pixels
Frame Rate	Nominal 25 fps.
Light sensitivity	Less than 10 mLux.
Control Interfacitivity	RS422

Environmental Conditions

Environmental Spec	MIL-STD-810
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Specifications are subject to change without notice