

GÜCÜNÜ BİLGİDEN ALIR

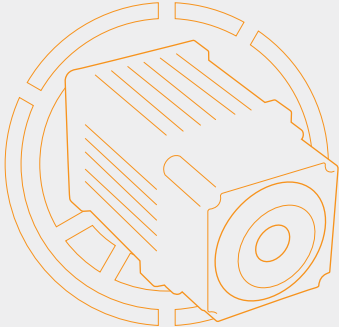


Lightweight
Low Power

Electro Optic
Systems

DVS⁴⁰

INFRARED
CAMERA





DVS⁴⁰ ALTAY Infrared Camera

GENERAL

- 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
- High range performance
- Advance image processing algorithms
- Low power consumption
- Compact size
- Low weight

APPLICATION

- Driver Vision System (**DVS**)





SPECIFICATIONS

Array Specifications

Array Type	Uncooled microbolometer
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; < 30 mK (optional)
Pixel Operability	> 99.5 %

Optical Interface

FOV (Horizontal)	44° (\pm 10°)
f/#	1.2
Focus Type	Fixed focus, Athermalized
Focus Range	0.6 m to infinity

Mechanical Interface

Max. Dimensions	60 mm x 60 mm x 110 mm
Max. Weight	400 gr

Imaging Performance

Frame Rate	25 Hz [CCIR (PAL)] (Configurable up to 60 Hz.)
Time-to-image	< 2 sec
Video Latency	Analog < 60 ms; Digital < 3 ms
Digital Zoom	X1, X2, X3, X4, X8
Digital Zoom Continuous	From X1 to X8 with 0.02 steps
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	With Shutter (periodic or externally controllable)

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)

Environmental Conditions

Working Temperature	[-32 °C, +55 °C]
Storage Temperature	[-40 °C, +71 °C]

Range Performance*

	NATO STANAG 4347 ; ΔT : 2°C, 1/3/6 cycles, %50 probability, $\alpha=0.2\text{km}^{-1}$
Target (2.3 m x 2.3 m)	Detection: 1400 m Recognition: 370 m Identification: 180 m
Target (1.8 m x 0.5 m)	Detection: 500 m Recognition: 120 m Identification: 60 m

* **DRI** values shown are nominal values and should be used as an estimation. Exact **DRI** calculations depend on a wide variety of conditions.

