

ALTAY Infrared Camera

AIR-35 IR Camera enables detection of threats in total long life for the camera, and eliminates the need for a cry

AIR-35 IR Camera offers compact and light weight solution. It has very low power consumption value. Infrared video is available less than one second.

AIR-35 IR Camera is suitable for many applications where compact size, lightweight and low power features are required.

GENERAL

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

APPLICATION

- Homeland Security
- Thermal Weapon Sight (TWS)
- Unmanned Air Vehicle (UAV)
- Hand Held Thermal Imagers (HHTI)





Spectral Band	8-12 μm (LWIR)
Array Type	Uncooled Microbolometer
Detector	640 (Horizontal) x 480 (Vertical)
Pitch Size	17μm x 17μm
Focus Mechanism	Atermalized Fixed Focus
Focus Range	1m to infinity
Optical Interface	
FOV (Horizontal)	17.6° (±%10)
Focal Length	35mm (±%10)
f/#	1.2 (±%10)
Performance	
Frame Rate	25 Hz (configurable up to 60 Hz)
Time-to-image	< 2 sec
Digital Zoom	X1, X2, X3, X4, X8
Digital Zoom Continuous	From X1 to X8 with 0.02 steps.
Power Supply	Standard Version: 2.8 V to 5.5 V Extended Version: 6 V to 17 V
Power Consumption	Video Output: Parallel video < 0.6 W Video Output: Parallel video + Analog Video < 0.72 W
	Video Output: Parallel video + Analog Video Ethernet (optional) < 1.2 W
	Note: In all modes, image processing algorithms except local contrast enhancement are
	active. When local contrast enhancement is enabled, power consumption will be
	increased by 40 mW.
Noise Cancelation	Adaptive Temporal and Spatial Noise Cancelation
Detail Enhancement	Edge Aware Adaptive Digital Detail Enhancement
Image Enhancement	Plateau-based Adaptive Histogram Equalization/Linear/Manual
Contrast Enhancement	Local Contrast Enhancement
Color Palette	Up to 8 different palettes
Live Calibration	With Shutter (periodic or externally controllable)
Interfaces	
Day TV	LVDS or Parallel Video Interface RS232 control interface
Connectors	DF20G-40DP-1V (56) Hirose 40 pin board-to-cable. USL00-30L-B (Sony Connector for Day TV option)
Mating connectors	DF20A-40DS-1C (Main connector, 40 pin) USL20-30SS-012.0-B (Sony connector for Day TV option)
Communication	RS-232 (9600/19200/38400/57600/115200) Ethernet (1 Gbps) (optional) GPIO
	Note: In GPIO mode, only basic controls are available.
Digital Video Output	Parallel Video 1.8 V or 3.3 V LVCMOS: 8 Data + Vsync + Hsync + Pixclk
	Ethernet (optional): Real-Time Transport Protocol. Payload type is RFC4175 Cameralink (optional)
Analog Video Output	PAL
GPIO	5 pins 1.8 V or 3.3 V LVCMOS (Configurable with respect to customer requirements)
External Trigger	Yes (controlled with 1 GPIO)
Environmental Conditions	
Environmental Spec	MIL-STD-810
Range Performance	NATO STANAG 4347; ΔT: 2°C, 1/3/6 cycles, %50 probability, a=0.2km ⁻¹
Target (2.3 m x 2.3 m)	Detection: 2400 m (±%10)
	Recognition: 600 m (±%10)
	Identification: 370 m (±%10)
Target (1.8 m x 0.5 m)	Detection: 950 m (±%10)
	Recognition: 250 m (±%10)

Specifications are subject to change without notice.