

MT-CL-MicroCAM-B6417

Miniature LWIR Camera with Camera Link® Output

LWIR Camera
640 × 480 17µm



MT-CL-MicroCAM-B6417 is a compact LWIR camera with Camera Link® output. It has an uncooled microbolometer FPA working in the 8µm-12µm LWIR spectral band. The FPA is built using our low-noise **ROIC** called **MT6417BA**. The FPA has a format of 640 × 480 and pixel pitch of 17µm with an active imaging area of 10880µm × 8160µm. The camera has a compact camera electronics built using our new **MTAS1410X4 ASIC** product with on-chip ADCs, microcontroller, and high-speed LVDS serializers. This allows development of compact, low-power, and low-noise LWIR cameras. The camera measures **60 mm × 54 mm × 51.6 mm** without the lens, and weighs less than **240 grams** without optics. The camera has a M34-mount lens interface and comes with a 19mm f/1.0 LWIR lens. Different lens options can be provided upon request.

Application Areas:

- Thermal Inspection
- Industrial Process Control
- Security and Surveillance
- Building Automation
- Driver Vision Enhancement
- Drone and UAV-based Imaging



Detailed Technical Specifications

MT-CL-MicroCAM-B6417

Electrical Specifications

Array Size	Format: 640 × 480	Pitch: 17µm
Active Area	10.88 mm × 8.16 mm	
Detector Type	Resistive µ-bolometer	Spectrum: 8µm-12µm
Sensor Core	ROIC: MT6417BA	ASIC: MTAS1410X4
Video Output	Camera Link Base Configuration (26-pin SDR Connector)	
	Video Stream and Camera Control	
Frame Rate	≤ 30 fps	
Integration Time	Programmable, in steps of one period of the pixel clock	
Gain	Programmable, 0.75x, 1x, 2x	
NETD	≤ 100 mK with f/1.0 optics	
Supply Voltage	4V – 5V DC (Type-C USB Connector)	
Power Dissipation	≤ 2.0 W at 5V DC	

Mechanical Specifications

Dimensions	60.0 mm × 54.0 mm × 51.6 mm (w/o optics)
Weight	240 grams w/o optics
Mounting	Screw hole for tripod

Optical Specifications

Lens	LWIR Optimized, f/1.0, 19 mm
Mount	M34 x 0.75-Mount

Software Specifications

Software Functions	Video / Image Display, Save, Noise Measurement
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