

IRCAMERAS

INFRARED IMAGING SYSTEMS

L-Wave Uncooled

Microbolometer Infrared Camera

Our new L-Wave offers high sensitivity and image quality a compact, easy to use infrared camera. With a typical temperature sensitivity of <70 mKelvin, the L-Wave is suitable for demanding thermal imaging requirements including non destructive testing, surveillance, target signature and R&D applications. The L-Wave is based on a 320 x 240 VOx microbolometer array.

Packaged in a ruggedized housing, the L-Wave is suitable for installation into a wide range of environments and applications. The L-Wave offers both analog video and simultaneous 14 bit CameraLink digital output. A variety of interchangeable optics are available. Up to three non uniformity correction tables can be stored in the camera which is also equipped with an internal NUC flag. The camera is controlled via a serial communications interface.

For data acquisition and analysis, IRcameras Thermography Suite software offers powerful tools for digital image recording, measurement and analysis.

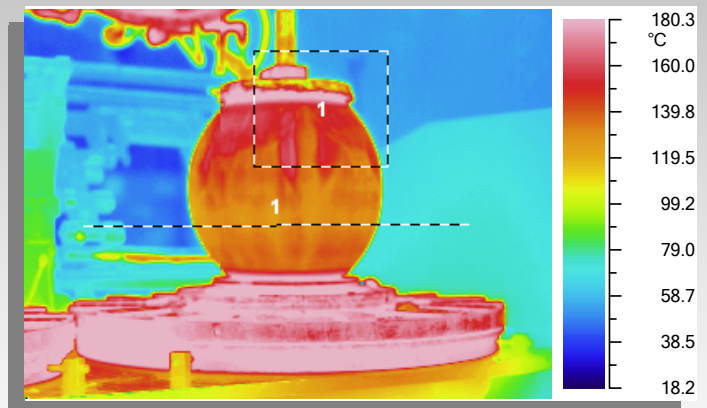


Key Product Features

- 8 μ m - 14 μ m spectral response
- High thermal sensitivity
- 14 bit digital CameraLink & RS-170 video outputs
- Interchangeable optics
- Radiometric calibration
- Remotely controlled focus
- Three on board NUC tables
- Compact & lightweight

Applications

- Scientific imaging
- Research & development
- Target signature
- Medical
- Industrial process monitoring
- Security & surveillance



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L-Wave Uncooled Microbolometer Infrared Camera

FPA Specifications		
Detector type	Microbolometer	
Array Format	320 x 240	
Detector Substrate	Vanadium Oxide	
Pixel Size / Fill Factor	51µm / 60%	
Spectral Range	8 - 14 µm	
Dynamic Range	> 1000:1 Typical	
Operability	> 99.5%	
FPA Operating Temperature	25°C	
NEdT (camera level)	<80mK (w/ f1.4 optic)	

Packaging / Cooler Specifications	
Cooler Type	Thermoelectric Cooler (TEC) Temperature Stabilizer
TEC Stabilization Time	<60 seconds
Package Type	Hermetically Sealed Vacuum Package
Package Window	AR Coated

Camera Performance	
Analog Video	NTSC or PAL (factory set)
FPA Frame Rate	59.94 frames/sec NTSC, 50 frames/sec PAL
Digital Video	14 - Bit (uncorrected, corrected, pixel replaced)
Digital Video Format	Camera Link
Measurement Accuracy	±2 degrees or 2%
Non-Uniformity Correction Tables	Up to 3 available on board; user upload enabled
Calibration Flag	Ambient and Elevated Temp
External Timing	External Synch and External Clock
Remote Control	RS232

Electrical/Mechanical	
Power Input	+6 to +16 VDC
Power Consumption	< 4 W Steady State (2.75 W typical @ 25°C amb), < 12 W at Startup (1 min)
Dimensions	3.00" H x 3.00" W x 6.5" L minimal (w/o lens)
Weight	2.5 lbs minimal (w/o lens)
Operating Temperature	0° to 50° C
Storage Temperature	-40 to 85°
Humidity	10% - 95% non condensing

f/1.4 Optics		
Focal Length	Minimal Focus	FOV
25mm	<6 inches	36° x 27°
50mm	17 inches	18° x 14°
100mm	60 inches	9° x 7°

All specifications subject to change without notice. Export of the commodities described herein from the United States is strictly prohibited without a valid export license issued by the U.S. Department of State or U.S. Commerce Department (jurisdiction contingent on specific product).

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