FLIR A325sc

Thermal imaging camera for real-time analysis

EXCELLENT IMAGE QUALITY AND THERMAL SENSITIVITY

FLIR A325sc is equipped with an uncooled Vanadium Oxide (VoX) microbolometer detector that produces thermal images of 320 x 240 Pixels. These pixels generate crisp and clear detailed images that are easy to interpret with high accuracy. The FLIR A325sc will make temperature differences as small as 50 mK clearly visible.

FAST DATA TRANSFER

FLIR A325sc comes with a RJ-45 Gigabit Ethernet connection which supplies 14-bit 320 × 240 images at rates as high as 60 Hz.

GIGE VISION™ STANDARD COMPATIBILITY

GigE Vision allows fast image transfer using low cost standard cables up to 100 meters. With GigE Vision, hardware and software from different vendors can integrate seamlessly over gigabit ethernet connections.

GENICAM™ PROTOCOL SUPPORT

GenICam creates a common application programming interface (API) for cameras regardless of the interface technology or features implemented. Because the API for GenICam cameras will always be the same, cameras like the A325sc can be easily integrated into third party software.

SOFTWARE

FLIR A325sc camera works seamlessly with FLIR ResearchIR Max software enabling intuitive viewing, recording and advanced processing of the thermal data provided by the camera. A Software Developers Kit (SDK) is optionally available.
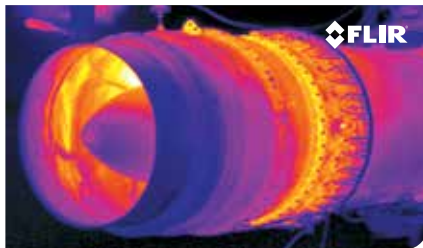
MATHWORKS® MATLAB

Control and capture data directly into MathWorks® Matlab software for advanced image analysis and processing.

KEY FEATURES

- Uncooled microbolometer: 320 x 240 pixels
- Gigabit ethernet interface
- Close-up and telephoto lenses available
- ResearchIR max software included
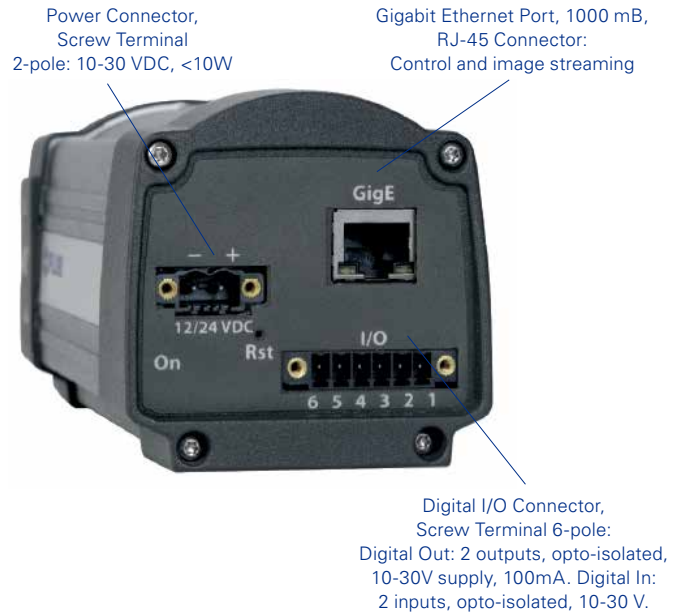- Matlab compatible
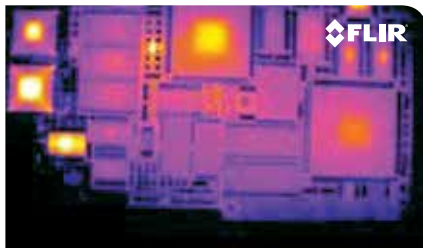
Verification of PCB

Jet engine

The World's Sixth Sense™

Imaging Specifications

Detector	FLIR A325sc
Detector Type	Uncooled Microbolometer
Spectral Range	7.5 – 13.0 µm
Resolution	320 × 240
Detector Pitch	25 µm
NETD	<50 mK
Electronics / Imaging	
Time Constant	<12 ms
Frame Rate	60 Hz
Dynamic Range	14-bit
Digital Data Streaming	Gigabit Ethernet (60 Hz)
Command & Control	Gigabit Ethernet
Measurement	
Standard Temperature Range	-20°C to 120°C (-4°F to 248°F) 0°C to 350°C (32°F to 662°F)
Optional Temperature Range	Up to 2,000°C (3,632°F)
Accuracy	±2°C or ±2% of Reading
Optics	
Camera f/#	f/1.3
Integrated Lens	18 mm (25°)
Available Lenses	76 mm (6°), 30 mm (15°), 10 mm (45°), 4 mm (90°)
Close-up Lenses / Microscopes	Close-up 25 µm, 50 µm, 100 µm
Focus	Automatic or Manual (Motorized)
Image Presentation	
Digital Data Via PC	Using ResearchIR Software
General	
Operating Temperature Range	-15°C to 50°C (5°F to 122°F)
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)
Encapsulation	IP 40 (IEC 60529)
Bump / Vibration	25 g (IEC 60068-2-29) / 2 g (IEC 60068-2-6)
Power	12/24 VDC, 24 W Absolute Max.
Weight w/Lens	0.7 kg (1.54 lb)
Size (L × W × H) w/Lens	170 × 70 × 70 mm (6.7 × 2.8 × 2.8 in)
Mounting	¼"-20 (on three sides), 2 × M4 (on three sides)

Power Connector, Screw Terminal 2-pole: 10-30 VDC, <10W

Gigabit Ethernet Port, 1000 mB, RJ-45 Connector: Control and image streaming

Digital I/O Connector, Screw Terminal 6-pole: Digital Out: 2 outputs, opto-isolated, 10-30V supply, 100mA. Digital In: 2 inputs, opto-isolated, 10-30 V.

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