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 x 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

www.flir.com

Verification of PCB

Jet engine

MathWorks
### Imaging Specifications

<table>
<thead>
<tr>
<th>Detector</th>
<th>FLIR A325sc</th>
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</thead>
<tbody>
<tr>
<td>Detector Type</td>
<td>Uncooled Microbolometer</td>
</tr>
<tr>
<td>Spectral Range</td>
<td>7.5 – 13.0 μm</td>
</tr>
<tr>
<td>Resolution</td>
<td>320 × 240</td>
</tr>
<tr>
<td>Detector Pitch</td>
<td>25 μm</td>
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<tr>
<td>NETD</td>
<td>&lt;50 mK</td>
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</tbody>
</table>

### 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)

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