## FLIR A325sc



Verification of PCB


Jet engine

## EXCELLENT IMAGE QUALITY AND THERMAL SENSITIVİTY

FLIR A325sc is equipped with an uncooled Vanadium Oxide (VoX) microbolometer detector that produces thermal images of $320 \times 240$ 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 $320 \times 240$ images at rates as high as 60 Hz .

## GIGE VISIDN ${ }^{\text {M }}$ STANDARD CDMPATIBILITY

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 ${ }^{\text {T }}$ 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® ${ }^{\text {® }}$ MATLAB

Control and capture data directly into MathWorks ${ }^{\circledR}$ Matlab software for advanced image analysis and processing.

## KEY FEATURES

- Uncooled microbolometer: $320 \times 240$ pixels
- Gigabit ethernet interface
- Close-up and telephoto lenses available
- ResearchIR max software included
- Matlab compatible

Imaging Specifications

| Detector | FLIR A325sc |
| :---: | :---: |
| Detector Type | Uncooled Microbolometer |
| Spectral Range | $7.5-13.0 \mu \mathrm{~m}$ |
| Resolution | $320 \times 240$ |
| Detector Pitch | $25 \mu \mathrm{~m}$ |
| NETD | $<50 \mathrm{mK}$ |
| Electronics / Imaging |  |
| Time Constant | $<12 \mathrm{~ms}$ |
| Frame Rate | 60 Hz |
| Dynamic Range | 14-bit |
| Digital Data Streaming | Gigabit Ethernet (60 Hz) |
| Command \& Control | Gigabit Ethernet |
| Measurement |  |
| Standard Temperature Range | $-20^{\circ} \mathrm{C}$ to $120^{\circ} \mathrm{C}\left(-4^{\circ} \mathrm{F}\right.$ to $\left.248^{\circ} \mathrm{F}\right)$ $0^{\circ} \mathrm{C}$ to $350^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.$ to $662^{\circ} \mathrm{F}$ ) |
| Optional Temperature Range | Up to $2,000^{\circ} \mathrm{C}\left(3,632^{\circ} \mathrm{F}\right)$ |
| Accuracy | $\pm 2^{\circ} \mathrm{C}$ or $\pm 2 \%$ of Reading |
| Optics |  |
| Camera f/\# | f/1.3 |
| Integrated Lens | $18 \mathrm{~mm}\left(25^{\circ}\right)$ |
| Available Lenses | $76 \mathrm{~mm}\left(6^{\circ}\right), 30 \mathrm{~mm}\left(15^{\circ}\right), 10 \mathrm{~mm}\left(45^{\circ}\right), 4 \mathrm{~mm}\left(90^{\circ}\right)$ |
| Close-up <br> Lenses / Microscopes | Close-up $25 \mu \mathrm{~m}, 50 \mu \mathrm{~m}, 100 \mu \mathrm{~m}$ |
| Focus | Automatic or Manual (Motorized) |
| Image Presentation |  |
| Digital Data Via PC | Using ResearchIR Software |
| General |  |
| Operating Temperature Range | $-15^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}\left(5^{\circ} \mathrm{F}\right.$ to $\left.122^{\circ} \mathrm{F}\right)$ |
| Storage <br> Temperature Range | $-40^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right)$ |
| 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 | $0.7 \mathrm{~kg}(1.54 \mathrm{lb})$ |
| Size ( $L \times W \times H$ W/Lens | $170 \times 70 \times 70 \mathrm{~mm}(6.7 \times 2.8 \times 2.8 \mathrm{in})$ |
| Mounting | $1 / 44^{\prime \prime}-20$ (on three sides), $2 \times \mathrm{M} 4$ (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, 100 mA . Digital In: 2 inputs, opto-isolated, 10-30 V.

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## Specifications are subject to change without notice

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