

The FLIR A325 is an affordable accurate and intelligent solution for Research and Development applications. Easy to use, this thermal imager clearly displays the thermal characteristics of products and processes – delivering critical information needed to cost-effectively solve design problems and improve reliability.



- > Gigabit Ethernet Connectivity
- > Integrated ExaminIR™ Software
- > 320x240 Image Resolution
- > Compact, Rugged, and Lightweight
- > Up to 60Hz Real-Time Digital Video Recording
- > Precision Non-contact Temperature Measurement
- > Maintenance-free, Uncooled, Microbolometer Detector
- > Simultaneously Access Data From Multiple Cameras

**Low Cost
High
Performance**

Affordable Research Package

The FLIR A325StartIR Kit consists of a rugged IR camera and the FLIR ExaminIR Software. It provides an affordable, flexible and powerful solution for real-time thermal analysis.

Instant Non-contact Temperature Measurement

The A325 StartIR Kit was designed from the ground up to deliver accurate thermographic imaging and repeatable temperature measurement. Each thermal image is built from over 76,000 individual picture elements that are sampled by the camera's on-board electronics and software to measure temperature.

Optics and Focus Options

The A325 comes standard with a built-in 25° lens. Additional fields of view can be achieved with optional 15° and 45° lenses. Each A325 lens can focus manually or automatically via a built in motorized focus mechanism.

Compact, Rugged, and Lightweight

Compact and lightweight, this portable yet powerful research device fits easily on a test bench and can be readily carried to other locations for fast, mobile data acquisition and analysis.

Gigabit Ethernet Data Transfer

The A325 StartIR Kit is equipped with a 1000MBit, RJ-45, Gigabit Ethernet connection with a data rate into the ExaminIR software of 60Hz.

Easy Operation: Plug and Play

The A325 StartIR Kit is a simple solution due to its universal plug and play (uPnP) standard protocol and GigE Vision control protocol. Simply connect the camera to a PC and produce high-quality real-time radiometric images. The camera can be fully controlled from the PC.

FLIR ExaminIR: Powerful, Real-time Storage and Analysis Software

FLIR ExaminIR has been developed for use in R&D environments where detailed thermal analysis of dynamic events is required. It offers powerful built-in measurement and analysis functions (spot measurements, line profiles, area histograms, and more) for fast and extensive temperature analysis.

Tailored To Your Application

FLIR Systems offers a complete series of accessories, including optics, enclosures, data systems, and software tools, to suit the most demanding applications from the lab to the production line.

FLIR® A325 StartIR Kit Specifications

| Imaging Performance | |
|-----------------------------------|--|
| Field of View/Min. Focus Distance | Built in 25° × 18.8°/0.4m (1.3 ft.) |
| Focusing | Auto focus, motorized manual |
| Detector Type | Focal Plane Array (FPA), uncooled microbolometer |
| Spectral Range | 7.5 to 13.0 μm |
| Pixel Resolution | 320×240 |
| Measurement | |
| Temperature Ranges | -20°C to +120°C (-4°F to 248°F) 0°C to +350°C (32°F to 662°F) Optional +250°C to +1200°C (482°F to 2192°F) |
| Thermal Sensitivity (NETD) | <0.07°C (<0.14°F) @ +30°C (+86°F) |
| Accuracy (% of Reading) | ±2°C or ±2% |
| Individual Emissivity Settings | Per region of interest |
| Measurement Corrections | Reflected ambient, distance, relative humidity, external optics. Automatic, based on user input. |
| Image Presentation | |
| Digital Output | 1000MBit Gigabit Ethernet |
| Frame Rate to Researcher | 60 Hz |
| Gigabit Ethernet Output | 14-bit radiometric |

| Power Source | |
|----------------------------------|---|
| AC Operation | AC adapter 110/220 VAC, 50/60Hz |
| DC Operation | 10–30V normal polarity protected, <10W |
| Environmental | |
| 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) |
| Humidity (operating and storage) | IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) |
| Encapsulation | IP 40 (IEC 60529) |
| Bump, Operational | 25 g (IEC 60068-2-29) |
| Vibration, Operational | 2 g (IEC 60068-2-6) |
| EMC | EN 61000-6-2:2001 (Immunity) EN 61000-6-3:2001 (Emission), FCC 47 CFR Part 15 Class B (Emission) |
| Physical Characteristics | |
| Size | 70×70×170mm |
| Weight | 0.7 kg |
| Mounting | ¼"-20 and 2×M4 on three sides |
| Interchangeable Lenses/Options | |
| Field of View | 15° telephoto lens 45° wide angle lens |
| Lens Recognition | Automatic lens recognition and measurement corrections |

| User Configuration Table | | |
|--------------------------|--|---|
| TYPE | FUNCTION | REMARK |
| Digital Input | TTL level • Shutter disable • V-sync in | Isolation and relay function in external module |
| Digital Output | TTL level • Program control • V-sync out | Isolation and relay function in external module |

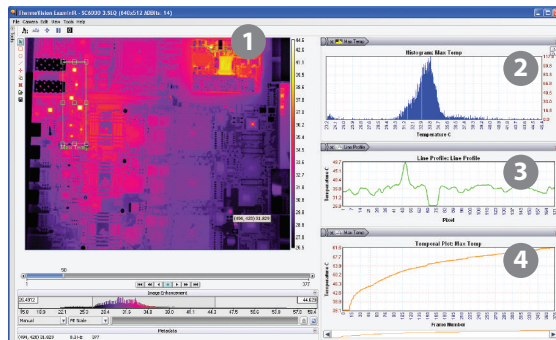
FLIR A325



GEN*i*CAM
GIG*E*™
VISION

- 1 Power Connector, Screw Terminal 2-pole:** 10–30VDC, <10W.
- 2 Ethernet Port, 1000 MB, RJ-45 Connector:** Control and image streaming.
- 3 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, 10–30V.

FLIR ExaminIR Software



- 1 Real-time, Playback, Static Image Display**
- 2 Histogram Analysis**
- 3 Line Profile Temperature Graph**
- 4 Temperature vs. Time Plotting**

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THE GLOBAL LEADER IN INFRARED CAMERAS

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