



FLIR AX8

Thermal Imaging Camera For Continuous Condition and Safety Monitoring

FLIR AX8 is a thermal sensor with imaging capabilities. Combining thermal and visual cameras in a small, affordable package, the AX8 provides continuous temperature monitoring and alarming for critical electrical and mechanical equipment.

The AX8 helps you guard against unplanned outages, service interruptions, and equipment failure. You'll get the benefits of continuous condition monitoring and hot spot detection without the need for periodic manual scans.

Compact and easy to install, AX8 provides continuous monitoring of electrical cabinets, process and manufacturing areas, data centers, energy generation and distribution, transportation and mass transit, storage facilities and refrigeration warehouses.

AUTOMATIC ANALYSIS AND ALARMS

With its streaming video output, the AX8 not only gives you live video of every installation, but it also provides automated alarming when pre-set temperature thresholds are exceeded as well as temperature trend analysis.

INDUSTRIAL PROTOCOL

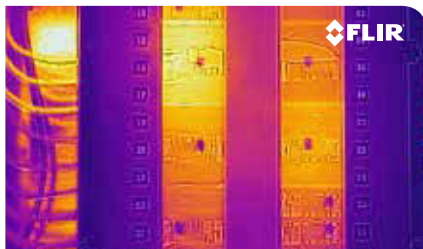
Since FLIR AX8 is Ethernet/IP and Modbus TCP compliant analysis and alarm results can easily be shared to a PLC. Digital inputs/outputs are available for alarms and control of external equipment. An image masking function allows you to select only the relevant part of the image for your analysis.

COMPACT & EASY TO INSTALL

Combining thermal and visual cameras in a small, affordable package, the AX8 measures only 54 x 25 x 95 mm, making it easy to install in space-constrained areas for uninterrupted condition monitoring of critical electrical and mechanical equipment.

MULTIPLE VIDEO OPTIONS

With AX8, you can view its thermal imagery, visible light imagery, or the two combined into FLIR's proprietary, patent pending MSX multispectral dynamic imaging. MSX provides image detail from the visible camera embossed on the thermal image, giving you, sharper edge detail, the ability to read labels and better contextual awareness



Loose Connection



Continuous monitoring of a motor.

Technical specifications FLIR AX8

| Imaging & Optical Data | |
|---|---|
| IR resolution | 80 × 60 pixels |
| Thermal sensitivity/NETD | < 0.10°C @ +30°C (+86°F) / 100 mK |
| Field of view (FOV) | 48° × 37° |
| Focus | Fixed |
| Detector data | |
| Detector type | Focal Plane Array (FPA), uncooled microbolometer |
| Spectral range | 7.5–13 μm |
| Visual camera | |
| Built-in digital camera | 640 × 480 |
| Digital camera, FOV | Adapts to the IR lens |
| Sensitivity | Minimum 10 Lux without illuminator |
| Measurement | |
| Object temperature range | –10°C to +150°C (14°F to 302°F) |
| Accuracy | ±2°C (±3.6°F) or ±2% of reading (+10 to +100°C @ +10 to +35 amb) |
| Measurement analysis | |
| Spotmeter | 6 |
| Area | 6 boxes with max./min./average |
| Automatic hot/cold detection | Max/Min temp. value and position shown within box |
| Measurement presets | Yes |
| Atmospheric transmission correction | Automatic, based on inputs for distance, atmospheric temperature and relative humidity |
| Optics transmission correction | Automatic, based on signals from internal sensors |
| Emissivity correction | Variable from 0.01 to 1.0 |
| Reflected apparent temperature correction | Automatic, based on input of reflected temperature |
| External optics/windows correction | Automatic, based on input of optics/window transmission and temperature |
| Measurement corrections | Global object parameters |
| Alarm | |
| Alarm functions | Automatic alarms on any selected measurement function. A maximum of 5 alarms can be set |
| Alarm output | Digital Out, store image, file sending (ftp), email (SMTP), notification |
| Set-up | |
| Color palettes | Color palettes (BW, BW inv, Iron, Rain) |
| Set-up commands | Date/time, Temperature °C/°F |
| Web interface | Yes |
| Storage of images | |
| Storage media | Built-in memory for image storage |
| Image storage mode | IR, visual, MSX |
| File formats | JPEG+FFF |

| Ethernet | |
|----------------------------------|--|
| Ethernet | Control, result and image |
| Ethernet, type | 100 Mbps |
| Ethernet, standard | IEEE 802.3 |
| Ethernet, connector type | M12 8-pin X-coded |
| Ethernet, video streaming | Yes |
| Ethernet, power | Power over Ethernet, PoE IEEE 802.3af class 0. |
| Ethernet, protocols | Ethernet/IP, Modbus TCP, TCP, UDP, SNMP, RTSP, RTP, HTTP, ICMP, IGMP, sftp, SMTP, SMB (CIFS), DHCP, MDNS (Bonjour) |
| Image streaming | |
| Image streaming formats | Motion JPEG, MPEG, H.264 |
| Image streaming resolution | 640 × 480 |
| Image modes | Thermal, Visual, MSX (IR-image with enhanced detail presentation) |
| Automatic image adjustment | Continuous |
| Power system | |
| External power operation | 12/24VDC, 2 W continuously/ 3.1 W absolute max |
| External power, connector | M12 8-pin A-coded (Shared with digital I/O) |
| Voltage Allowed range | 10.8–30VDC |
| Environmental data | |
| Operating temp. range | 0°C to +50°C (32°F to +122°F) |
| Storage temp. range | –40°C to +70°C (–40°F to +158°F) IEC 68-2-1 and IEC 68-2-2 |
| Humidity (operating and storage) | IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) / 2 cycles |
| EMC | EN 61000-6-2:2001 (Immunity) EN 61000-6-3:2001 (Emission) FCC 47 CFR Part 15 Class B (Emission) |
| Encapsulation | IP67 (IEC 60529) |
| Bump | 25 g (IEC 60068-2-29) |
| Vibration | 2 g (IEC 60068-2-6) |
| Physical data | |
| Camera size (L × W × H) | 54 × 25 × 79 mm (2.1 × 1 × 3.1 in.) w/o connectors 54 × 25 × 95 mm (2.1 × 1 × 3.7 in.) w/ connectors |
| Shipping information | |
| Packaging | Infrared camera with lens, printed documentation, user documentation CD-ROM |



The World's Sixth Sense™