



## INTELLIGENT FIXED-MOUNT SKIN TEMPERATURE SCREENING

# FLIR ELARA™ FR-345-EST



The FLIR Elara FR-345-EST is an affordable, fixed-mount radiometric camera for accurately measuring skin temperature\* at medium- to high-throughput entry control points. Equipped with on-edge, intelligent face detection, Elara FR-345-EST issues on-screen prompts to individuals when they need to remove glasses, while also guiding them to the correct position for best measurement. The non-contact camera automatically locates and measures the inner canthus (corner of the eye) within one second and provides an instant pass/fail graphic to the individual. Integration with VMS systems further streamlines workflow and decision-making for facilities, while helping security personnel maintain a safe distance from potential health risks. Elara FR-345-EST does not require or save personally identifiable information (PII) for skin temperature screening.

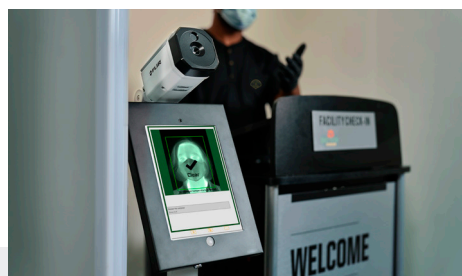
[www.flir.com/FR-345-EST](http://www.flir.com/FR-345-EST)



### FAST, AUTOMATED, AND ACCURATE SKIN TEMPERATURE SCREENING

Precise radiometric thermal camera automatically locates and measures the temperature of the inner canthus (corner of the eye)

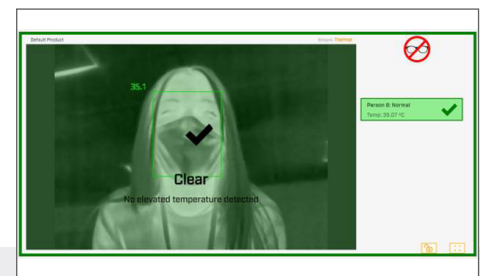
- Non-contact temperature measurement accurate within  $\pm 0.5^{\circ}\text{C}$  ( $\pm 0.9^{\circ}\text{F}$ )
- Fast one-second screen time after individual is correctly positioned, delivering high-throughput screening
- On-camera automatic canthus measurement with visual pass/fail confirmation
- Interactive display guides the user to proper distance and head pose for accurate inner canthus measurement



### FLEXIBLE VMS AND ACCESS CONTROL INTEGRATIONS

Seamless user experience through major VMS platforms simplifies installation, speeds workflow, and promotes faster decision-making

- Fully integrated setup, and operation available with FLIR United VMS
- Compatible with third party VMS
- Digital I/O support for access control integration
- Portrait and landscape modes available for installation flexibility



### INTELLIGENCE AT THE EDGE

On-camera algorithms provide rapid, reliable, and actionable screening results

- On-board CNN-based analytics
- Adaptive alarm threshold helps minimize false alarms
- Automatic calibration and self-screen operation provide instant pass/fail feedback
- Automatic face, mask, and eye-wear detection

## SPECIFICATIONS

### Thermal Sensor & Optics

|                                    |   |
|------------------------------------|---|
| Array Format (NTSC)                | 320 × 256   |
| Detector Type                      | Long-Life, Uncooled VOx Microbolometer  |
| Pixel Pitch                        | 17 µm   |
| Thermal Frame Rate                 | 20 Hz   |
| FOV                                | 45° × 34°   |
| F/#                                | 1.5   |
| Spectral Range                     | 7.5 µm to 13.5 µm   |
| Accuracy [Drift] in Screening Mode | ±0.5°C (±0.9°F)   |
| Object Temperature Range           | 15°C to 45°C (59°F to 113°F); camera provides contrast from -20°C to 120°C (-4°F to 248°F) but will not provide temperature information |
| Screening Mode Subject Distance    | 1m ± 0.2m   |

### Visible Light Camera

|              |                                 |
|--------------|---------------------------------|
| Sensor Type  | 1920 × 1080                     |
| Lens FOV     | HFOV = 75°<br>VFOV = 44°        |
| Focal Length | 4 mm                            |
| F/#          | 1.6                             |
| Sensitivity  | 0.05 Lux (@ f1.6 AGC ON, 30FPS) |

### Video

|                      |   |
|----------------------|---|
| Video Compression    | Two independent channels of H.264 or M-JPEG for visible<br>One channel of H.264 or M-JPEG for thermal       |
| Streaming Resolution | Thermal: upscaled to VGA (640 × 480)<br>Visible: 1080p (1920 × 1080), 720p (1280 × 720),<br>VGA (640 × 480) |

### System Integration

|              |   |
|--------------|---|
| Ethernet     | 10/100 Mbps   |
| Network APIs | FLIR SDK<br>FLIR CGI<br>ONVIF Profile S   |
| Digital I/O  | Input: one dry alarm contact<br>Output: one photo relay contact 1A max at 24 VAC/30 VDC |

### Network

|                     |  |
|---------------------|--|
| Supported Protocols | IPv4, HTTP, HTTPS, UPnP, DNS, NTP, RTSP, RTP, TCP, UDP, ICMP, IGMP, DHCP, ARP, IEEE 802.1X |
|---------------------|--|

### General

|                   |  |
|-------------------|--|
| Input Voltage     | 12-30 VDC (±10%)<br>24 VAC (21-28 VAC)<br>802.3at (PoE+) |
| Power Consumption | 17 W   |

### Environmental

|                                  |                |
|----------------------------------|----------------|
| IP Rating (Dust & Water Ingress) | IP54           |
| Operating Temperature Range      | 15°C to 45°C   |
| Storage Temperature Range        | -40°C to 70°C  |
| Humidity                         | 0-95% relative |
| Vandalism                        | IK10           |

### Compliance & Certifications

FCC Part 15 (Subpart B, class A)  
CE Marked  
RoHS  
WEEE  
ONVIF Profile S

### Video Analytics

Canthus detection and temperature measurement  
Face detection  
Mask detection  
Glasses detection  
Subject pose and distance detection

### Cyber Security

IEEE 802.1x  
TLS Authentication - control & streaming  
Digest authentication  
HTTPS encryption  
Encrypted FW upload  
Access control via firewall

Specifications are subject to change without notice.  
For the most up-to-date specs, go to [www.flir.com](http://www.flir.com)

\*DISCLAIMER: Contagions such as COVID-19, SARS, and other diseases can produce symptoms like elevated skin temperature—a possible sign of infection. While this FLIR camera is not capable of detecting or diagnosing viruses, it represent a simple, preliminary measure for mitigating further contagion and possible rebound, providing the confidence to return to normalcy. FLIR devices are intended for use as an adjunct to clinical procedures in the screening of skin surface temperature. Various environmental and methodological factors can impact thermal imaging; therefore, it should not be relied upon as the sole determinant of a person's body temperature. Use of a medical device will be needed to identify elevated body temperature.

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