FLIR

FLIR A500/A700-EST™

FLIR A500-EST and A700-EST thermal cameras are non-contact screening tools that serve as a first line of defense against potential health risks. These FLIR EST™ thermal screening solutions detect and visualize heat to quickly identify individuals with an elevated skin temperature. With on-camera FLIR Screen-EST™ Mode, the A500/A700-EST cameras can be deployed as a single, standalone screening station or in a network. Compatibility with industry standards such as Modbus TCP, MQTT, RESTful API for data transfer and RTSP for video makes third-party integration easy. The cameras can be connected to most Video Management Systems and are compatible with FLIR Screen-EST™ Desktop software.

Contagions such as COVID-19, SARS, and other diseases can produce symptoms like elevated skin temperature—a possible sign of infection. While FLIR cameras are not capable of detecting or diagnosing viruses, these US FDA registered cameras represent a simple, preliminary measure for mitigating further contagion and possible rebound, providing the confidence to return to normalcy.

www.flir.com/A500-A700-EST

EASY SET-UP & OPERATION
Begin screening quickly with limited ramp-up time and simple connections

- Integrated web browser with intuitive interface for simple camera set-up
- Standard Ethernet and Wi-Fi connectivity, and Power over Ethernet for single-cable installation
- Integrates easily into web services with RESTful API over XML or JSON, while ONVIF compliance accommodates standard security VMS and NVR solutions
- Multiple case mounting points to support tripod or permanent fixture installations
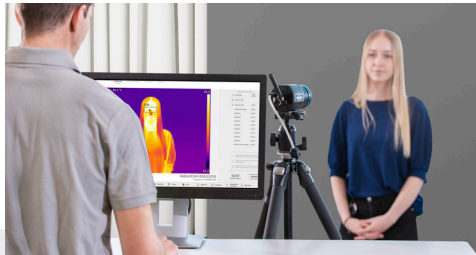
FAST, ACCURATE SCREENING
Performance hardware, smart analytics, and reliable calibration optimize the screening process

- On-camera FLIR Screen-EST Mode offers visual pass/fail graphic indicators and audible* alarms, enabling rapid decision-making
- Compatible with FLIR Screen-EST Desktop software, with automatic detection and measurement on faces for faster screening throughput
- Calibration with ambient drift compensation allows accurate screening without a reference
- Support for external blackbody compensation

*Via web interface


MAINTAINS SAFETY & PRIVACY
FLIR screening solutions are non-contact, safe, and effective

- On-camera FLIR Screen-EST Mode does not automatically store or record images or personal information
- Thermal imagery displays heat, not identifying facial features
- Thermal temperature measurement does not require personal contact and allows for social distancing in screening setups

SPECIFICATIONS

Imaging and optical data	A500-EST	A700-EST
Infrared resolution	464 × 348 pixels	640 × 480 pixels
Visual camera resolution	1280 × 960	
Thermal resolution/NETD	<40 mK@ 30°C/86°F (24° lens) <30 mK @ 30°C/86°F (42° lens)	
Lens	24° or 42°	
Focal length	17 mm (24° lens) or 10 mm (42° lens)	
Field of view	24° × 18° or 42° × 32°	
Spatial resolution (IFOV)	0.90 mrad/pixel (24° lens) 1.66 mrad/pixel (42° lens)	0.66 mrad/pixel (24° lens) 1.20 mrad/pixel (42° lens)
Focus	One-shot contrast, motorized, manual	
Framerate	30 Hz	
Detector data		
Focal plane array/spectral range	Uncooled microbolometer/7.5–14 μm	
Detector pitch	17 μm	12 μm
Screening mode		
Temperature measurement range	15°C to 45°C (59°F to 113°F)	
Screening accuracy (drift)	±0.3°C (±0.5°F)	
Image presentation		
Digital data streaming	Simultaneous thermal and visible	
Command and control	Ethernet and Wi-Fi	
Ethernet		
Ethernet connector type and standard	M12 8-pin X-coded, Female; 1000 Mbps, IEEE 802.3	
Ethernet power	Power over Ethernet, PoE IEEE 802.3af class 3	
Ethernet protocols	Modbus TCP Master, Modbus TCP Slave, EthernetIP, IEEE 1588, MQTT, SNMP, TCP, UDP, SNTP, RTSP, RTP, HTTP, HTTPS, ICMP, IGMP, sftp (server), FTP (client) SMTP, DHCP, MDNS (Bonjour), uPnP	
Wi-Fi		
Connector type and standard	Female RP-SMA; IEEE802.11a/b/g/n	
Connections	Peer to peer (ad hoc)or infrastructure (network)	
General		
Power	PoE	
External voltage	Allowed range = 18-56 VDC, 8 W max	
Size (L × W × H)	123 × 77 × 77 mm (4.84 × 3.03 × 3.03 in)	
Weight	0.82 kg (1.8 lb)	
Mounting	Base mounting: 4× M4 on 4 sides Tripod mounting: UNC ¼"-20 on 2 sides	
Box contents	Infrared camera with lens, Ethernet cable M12 to RJ45F (0.3 m/0.98 ft), printed documentation including login for web interface	

On-Camera FLIR EST™ Mode
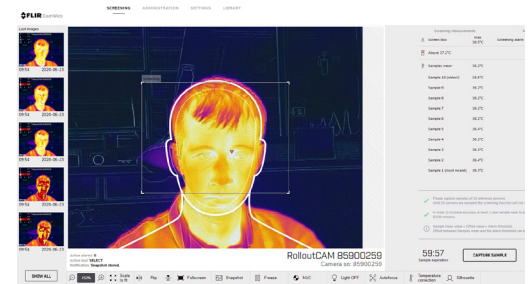
FLIR Screen-EST Mode is an on-camera method for simplified measurement of elevated skin temperature. This mode can display an alarm when a temperature greater than a user defined threshold is detected against a sampled average value. If the screening mode detects an individual with elevated skin temperature, they can then be evaluated using a medical device such as a thermometer. In this way, FLIR Screen-EST Mode provides a faster, safer, and more reliable method for conducting elevated skin temperature screening.

FLIR EST™ Desktop Software

FLIR Screen-EST™ Desktop is a computer screening software for FLIR T-Series, Exx-Series, and Axxx-Series thermal imaging cameras. The software deploys automatic measurement tools such as face detection and automatic average sampling to shorten screening times for individuals to two seconds. Fast screening performance makes FLIR Screen-EST Desktop the preferred solution for screening application at entries, checkpoints, and other high-traffic areas while maintaining recommended social distancing guidelines.

DISCLAIMER: 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.

FLIR The World's Sixth Sense®