

ThermalEST

TECHNICAL SPECIFICATIONS

- Non-contact measurement by Infrared Thermography
- Pre-configured to human body temperature 36.5–37.5 °C (97.7–99.5 °F)
- Works with the social distancing recommended range of 6 Ft and up
- Protects the screener who operates the system – distanced screening
- Convenient touch screen application for easy use
- Testing procedures formed by FDA guidelines of using thermal imaging for skin temperature measurements
- No need for calibrated blackbody device (fixed reference thermal device)
- All mounting accessories included, no need for any additional parts
- Your privacy is protected since we only use thermal imaging, no visible video is available, therefore the identity of patrons is not captured nor recorded by the system

ThermalEST is a complete solution for distanced screening. The system includes a fixed, pre-calibrated thermal imaging camera, a viewing station (tablet or android with large monitor) and a floor or counter mount.

ThermalEST uses ThermApp technology designed in Israel by a thermal imaging manufacturer with a special MD version to limit the use for screening purposes.

The imaging camera is tested in a 16 hour process recording over 2400 data points of thermal readings thus eliminating the need for a blackbody reference emitter. ThermalEST is designed to be used by non-professionals with no background experience necessary with such a system.

Thermal EST is the outcome of collaboration of three leaders in the military equipment industry, Rafael (brought to the world the Iron Dome system – Naval Area Defense system), Elbit (Electronic defense industries) and Opgal (Manufacturer of Thermal Optic solutions).

Xiom Security took the technology and built a self-standing system that will be easy to use and setup on site without prior knowledge



WHY IS THERMALEST UNIQUE?

As most thermal imaging cameras require a reference object to emit permanent temperature so the camera will produce an accurate reading, our Thermal EST camera was calibrated at the factory for all possible readings at the operational ambient temperature. This process takes hours, but the outcome is a prefixed camera loaded with software with thousands of reference charts that will eliminate the need to use a blackbody device and setup by a professional installer. Xiom has brought a simple to use screening system that will provide a fast and safe return to business while protecting the working environment in these tough times.

Hardware	
Minimal Requirements	Android 8 and above supporting USB OTG
High Resolution Touchscreen	Yes *
Software	
types of Measurement tools	Center Spot Hot/Cold Threshold based pallets Manual and auto scale
Measurement Settings	Emissivity, Reflected Temperature
Annotations	Text & Video Annotations
Output	Video & Audio (H.264), Snapshot (IR, VIS, Metadata)
Instant Share	Dropbox Email, SMS
Android Share	via media gallery
Color Pallets	Rainbow, Iron, Vivid, Grey, Red Hot, Blue Cold, PSY, Lava, Green
Temperature Scale Range	Auto, Manual
Zoom	Continuous digital zoom using touchscreen
Maintenance	bad pixel repair utility
Quick Access Menu	One Touch

Measurement Capability	
Resolution	384 x 288 pixels (>110K pixels)
Accuracy	±1 °C @ Targeted temperature ranges of 25°C - 45 °C @ ambient Temp of 25 °C
Sensitivity	NETD<0.07 °C
Temperature Range	0-50°C
NUC Calibration	Shutter less
Camera Hardware	
Imager	384 x 288 pixels micro bolometer LWIR 7.5-14um
Optics	6.8 mm lens (55° x 41°) Optical lenses available
Focus	Manual, 0.2m to infinity
Frame Rate	8.7Hz
Weight	
Size	6"x 4 5/8" x 8 1/2"
Operating Temperature	-10°C to +50°C (14°F to +122°F)
Storage Temperature	-20°C to +60°C (-4°F to +140°F)
Power Supply	No battery, 5V over USB OTG cable, power consumption <0.5W
Certification	CE,FCC,RoHS
Encapsulations	IP54
Visible Camera	Typically 8 Megapixels*
Mount	Standard Vesa 100mm X 100mm

