What is the Smart Temperature Screening Solution?

The Tyco Illustra elevated skin temperature screening solution comprises of a dual sensor, one Thermal and the other Color, camera and a temperature calibration device known as a Blackbody.

Using advanced face detection technology and in conjunction with the dual sensors, the camera will measure the temperature of a person’s forehead whilst the blackbody provides the constant temperature reference point. Should someone in the field of view be detected with a skin temperature above a predetermined level, an operator can be alerted to this fact through a variety of possible methods ranging from alerts in the VMS, events in an Access Control system, via a connected light/sounder to the camera, or even through a web browser connection.

Key Features

- Dual Image Sensor with thermal detector
- Up to 5MP resolution 2592 x 1944 with visible imager, 384 x 288 resolution with thermal imager
- True day / night
- Built in IR & white light illuminator
- True WDR, up to 120dB
- Smart facial temperature detection
- Alarm trigger by temperature anomaly
- High accuracy with blackbody calibration
- Built-in sound-light alarm
- 1CH audio input; 1CH built-in speaker
- PoE or 12VDC powered
- IP66 rating for outdoor application
The IEC standards for accuracy are at the heart of the development of the Tyco Illustra elevated skin temperature screening solution, and, to achieve this, the innovative technology within the camera measures the forehead temperature at multiple points as opposed to a single point approach. High accuracy brings with it the benefit of reducing false alarms to a minimum, which in turn results in fewer disruptions and increased flow of staff and visitors.

**Safe, contactless and accurate**
The Tyco Illustra Pro Thermal EST Camera, being contactless and therefore non-invasive, is ideal for deployment at controlled entrances to areas and facilities where initial skin temperature screening is needed for staff and visitors. With a ±0.3°C (±0.54°F) accuracy tolerance and an effective distance of 2 to 6 meters (6.5 to 19.7 feet), this elevated skin temperature screening solution provides a high degree of flexibility to meet the individual situational awareness requirements of a wide variety of installations.

### Specifications

<table>
<thead>
<tr>
<th><strong>Dual Imager Camera</strong></th>
<th><strong>Thermal Camera</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Detector Type</td>
<td>Amorphous-silicon Bolometers</td>
</tr>
<tr>
<td>Pixel Pitch</td>
<td>17μm</td>
</tr>
<tr>
<td>Infrared Spectral Range</td>
<td>8-14μm</td>
</tr>
<tr>
<td>Effective Pixels</td>
<td>384 × 288</td>
</tr>
<tr>
<td>Noise Equivalent Temperature Difference</td>
<td>&lt;35mK</td>
</tr>
<tr>
<td>Thermal Response Time</td>
<td>≈40ms</td>
</tr>
<tr>
<td>Lens Type</td>
<td>Fixed</td>
</tr>
<tr>
<td>Focal Length</td>
<td>12mm@F1.0</td>
</tr>
<tr>
<td>Field of View</td>
<td>Horizonta 29.7°, Vertical 22.5°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Visible Camera</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Imager</td>
</tr>
<tr>
<td>Effective Pixels</td>
</tr>
<tr>
<td>Min. Illumination</td>
</tr>
<tr>
<td>B/W 0.0012 Lux @F2.0, 0 Lux with IR</td>
</tr>
<tr>
<td>Shutter Speed</td>
</tr>
<tr>
<td>S/N Ratio</td>
</tr>
<tr>
<td>Lens Type</td>
</tr>
<tr>
<td>Focal Length</td>
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<tr>
<td>Field of View</td>
</tr>
<tr>
<td>Lens Mount</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Video</strong></th>
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</thead>
<tbody>
<tr>
<td>Video Compresson</td>
</tr>
<tr>
<td>H.264 Compression Standard</td>
</tr>
<tr>
<td>H.265 Compression Standard</td>
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<tr>
<td>Resolution</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Max.Frame Rate</td>
</tr>
<tr>
<td>Video Bit Rate</td>
</tr>
<tr>
<td>Multiple Streaming</td>
</tr>
<tr>
<td>Main Stream</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Visible</td>
</tr>
<tr>
<td>Thermal</td>
</tr>
<tr>
<td>Visible</td>
</tr>
<tr>
<td>Second Stream</td>
</tr>
<tr>
<td>Visible</td>
</tr>
<tr>
<td>Bitrate Control</td>
</tr>
<tr>
<td>Quality Control</td>
</tr>
<tr>
<td>Image Setting</td>
</tr>
<tr>
<td>Digital Noise Reduction</td>
</tr>
<tr>
<td>Digital Zoom</td>
</tr>
<tr>
<td>Video Privacy</td>
</tr>
<tr>
<td>Smart Codec</td>
</tr>
<tr>
<td>Display Mode</td>
</tr>
<tr>
<td>Intelligent Video Analytics</td>
</tr>
<tr>
<td>Alarm Trigger</td>
</tr>
<tr>
<td>Temperature Detection</td>
</tr>
<tr>
<td>Backfilling</td>
</tr>
<tr>
<td>Supported Languages</td>
</tr>
<tr>
<td>Network Protocol</td>
</tr>
<tr>
<td>Cyber Security</td>
</tr>
<tr>
<td>Online Connection</td>
</tr>
<tr>
<td>API</td>
</tr>
</tbody>
</table>

**Network**

**Audio Compression Format**

**Audio Bit Rate**

**Operational**

**Day & Night**

**Backlight Compensation**

**Wide Dynamic Range**

**Effective IR Distance**

**Digital Noise Reduction**

**Digital Zoom**

**Video Privacy**

**Smart Codec**

**Display Mode**

**Intelligent Video Analytics**

**Alarm Triggers**

**Backfilling**

**Supported Languages**

**Temperature Detection**

**Detection Mode**

**Detection Preset**

**Effective Distance**

**Temperature Alarm**

**Response Time**

**Calibration**

**Accuracy**

**Network**

**Network Protocol**

**Cyber Security**

**Online Connection**

**API**
### Interface

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Network</td>
<td>RJ45</td>
</tr>
<tr>
<td>Audio</td>
<td>1CH audio input; 1CH built-in speaker</td>
</tr>
<tr>
<td>Alarm</td>
<td>Alarm in/out, Built-in sound-light alarm</td>
</tr>
<tr>
<td>Hardware Reset</td>
<td>Supported</td>
</tr>
</tbody>
</table>

### Environmental

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>0°C ~ 35°C (32°F ~ 95°F)</td>
</tr>
<tr>
<td>Ingress Protection</td>
<td>IP66</td>
</tr>
<tr>
<td>Vandal Resistance</td>
<td>~</td>
</tr>
</tbody>
</table>

### General

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Power Supply</td>
<td>DC12V / PoE</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>&lt;9W</td>
</tr>
<tr>
<td>Dimensions (LxWxH)</td>
<td>10.94 inches (278mm) x 3.78 inches (96mm) x 3.50 inches (89mm)</td>
</tr>
<tr>
<td>Material</td>
<td>Metals</td>
</tr>
<tr>
<td>Net Weight</td>
<td>Approx. 2.6lbs, 1.2Kg</td>
</tr>
<tr>
<td>Installation</td>
<td>Wall mounting, Ceiling mounting, Tripod mounting</td>
</tr>
<tr>
<td>Certification</td>
<td>Certification testing is pending for major markets, including North America and the European Union.</td>
</tr>
</tbody>
</table>

### Dimensions

![Dimensions Diagram]( Diagram Image)

### Blackbody Calibrator

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Range</td>
<td>20.0°C to 70.0°C (68°F to 158°F)</td>
</tr>
<tr>
<td>Emissive Area</td>
<td>100mm x 100mm</td>
</tr>
<tr>
<td>Display Resolution</td>
<td>0.01°C (0.0018°F)</td>
</tr>
<tr>
<td>Radiance temperature</td>
<td>± 0.25°C between 33°C and 40°C (± 0.45°F between 91.4°F and 104°C)</td>
</tr>
<tr>
<td>expanded uncertainty</td>
<td>± 0.05°C (± 0.09°F)</td>
</tr>
<tr>
<td>Stability</td>
<td>0.96</td>
</tr>
<tr>
<td>Emissivity</td>
<td></td>
</tr>
<tr>
<td>Power Supply</td>
<td>110 - 240 VAC compatible. 50/60 Hz.</td>
</tr>
<tr>
<td>Net Weight</td>
<td>Less than 2kg</td>
</tr>
<tr>
<td>Calibration Certificate</td>
<td>24 months from manufacturing</td>
</tr>
</tbody>
</table>
Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPT05-B29-BND03</td>
<td>Dual imager temperature detection camera, Visible/Thermal, 5MP/384*288, 8mm/12mm, 20M IR, sound-light alarm, Alarm/Audio, Micro SD, DC/PoE, IP66, with Additional Blackbody</td>
</tr>
</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATR-ISTR</td>
<td>Illustra Pro Thermal EST Camera or Black Body Tripod Mount – 1/4”-20</td>
</tr>
<tr>
<td>IBJB-TIS-WB-A</td>
<td>Illustra Pro Thermal EST Back Box Mount</td>
</tr>
<tr>
<td>IBJB-TIS-WB-B</td>
<td>Illustra Pro Thermal EST Back Box With Side Conduit Opening</td>
</tr>
<tr>
<td>IBPN-TIS-WB</td>
<td>Illustra Pro Thermal EST Ceiling Pendant Mount (Requires a Back Box IBJB-TIS-WB-A or IBJB-TIS-WB-B)</td>
</tr>
<tr>
<td>IBPM-TIS-0</td>
<td>Illustra Pro Thermal EST Pole Mounting Box with Straps (Requires a Back Box IBJB-TIS-WB-A or IBJB-TIS-WB-B)</td>
</tr>
<tr>
<td>IBCM-TIS-0</td>
<td>Illustra Pro Thermal EST Corner Mount (Requires a Back Box IBJB-TIS-WB-A or IBJB-TIS-WB-B)</td>
</tr>
</tbody>
</table>

Important Notice: Elevated body temperatures identified by the Tyco Illustra Pro Thermal EST should be confirmed with secondary evaluation methods, such as contact thermometers. Temperature measurements should not be solely or primarily relied upon to diagnose or exclude a diagnosis of COVID-19, or any other disease. The Tyco Illustra Pro Thermal EST does not cause and cannot eliminate or prevent occurrences of the events that it is intended to detect or avert.

The product is only available in jurisdictions where it is qualified for import, sale and use. Please check with your local sales representative for product availability in your jurisdiction.

About Johnson Controls

Johnson Controls is a global diversified technology and multi-industrial leader serving a wide range of customers in more than 150 countries. Our 120,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities. Our commitment to sustainability dates back to our roots in 1885, with the invention of the first electric room thermostat.

For additional information, please visit www.illustracameras.com or follow Illustra on LinkedIn, Twitter, and Facebook.