DFI’s iMage Smart Thermal Imaging System provides automatic fever detection, recording and sending alarm as well as reducing queue-up and staff allocated for entrance control.

- Alarm Functions
- Quick Search
- Heterogeneous Integration

**ST102-CS Thermal Imaging System**

**ST102-CS pairs with Thermal Camera**
1. Up to 3 detection areas (any over-heat objects can be detected)
2. Detection distance: 1.5 to 2m
3. Object temperature range -20°C ~ 150°C

**iMage-EV**
- Entry level

**iMage-M**
- Advanced

**iMage-F**
- Multi-face

**ST102-CS pairs with Thermal Camera**
1. Up to 20 detection areas (any over-heat objects can be detected)
2. Detection distance: 2.5 to 5m
3. Extended Applications: fire detection, electrical fence, etc.

1. Especially detect human face
2. Up to 30 people at once
3. Detection distance: 2.5 to 5m
DFI’s Smart Thermal Imaging System iMage-EV is an entry-level package for single-person fever detection, featuring DFI’s ST102-CS high performance embedded computer and a thermal camera that simultaneously detects up to 3 areas within 1.5 to 2 meters.

**Single-Person Fever Detection**

- **Image Streaming Format**: MJPEG / H.264 / H.265
- **Image Modes**: Thermal, Visual
- **Thermal Sensitivity/NETD**: <40mK
- **Accuracy**: Max. ±2 %
- **Object temperature range**: -20°C to 150°C
- **Encapsulation**: IP67
- **Resolution**: RGB: 1600 x 1200; IR: 160 x 120 pixels
- **Temperature Measurement**: Set up Detection Zones / points (up to 3 zones / 3 points)

Once temperature abnormality is detected, the iMage-EV issues real-time alarms — CCTV video pop-up, warning sound, email notification, and etc. The iMage-EV, with a friendly UI, provides open APIs to integrate 3rd party systems, and help query information of certain events along with images.

**ST102-CS Box PC**

- **CPU**: 8th Gen Intel® Core™ i3-8100T Processor
- **Memory**: DDR4 SODIMM 4GB
- **Storage**: 1 x 2.5” SATA 3.0 Drive bay
- **I/O**: 2 GbE, 6 USB, 2 x DP++, 1 x HDMI, 1 x optional slim ODD bay
- **Power**: 12V DC power input
- **Operating Temperature**: -5 ~ 55°C
- **Operating System**: Windows 10 IoT Enterprise
- **Warranty**: Long Life Cycle Support, 2 years warranty
DFI’s Smart Thermal Imaging System iMage-M is an advanced package for multi-person fever detection. Pairing DFI’s ST102-CS industrial computer with a dual-lens thermal camera makes it possible to detect 20 areas within 2.5 to 5 meters. It is also future ready for extended security surveillance.

Once temperature abnormality is detected, the iMage-M issues real-time alarms — CCTV video pop-up, warning sound, email notification, and etc. The iMage-M with a friendly UI, provides open APIs to integrate 3rd party systems, and help query information of certain events along with images.

### Multi-Person Fever Detection

| Imaging Elements | RGB: 1/1.8” 6M CMOS / line-by-line scan  
Thermal: uncooled microbolometer  
(Infrared Range: 7.5 to 15μm) |
|------------------|----------------------------------------------------------------------------------|
| Resolution       | RGB: 6 million (3072x2048)  
Thermal: 336 x 252 pixels |
| Image Streaming Format | MxPEG / MJPEG / H.264 |
| Min. Illusion    | RGB: 0.1 lux, 1/60 second |
| Thermal Image   | Temperature scale or black/white |
| NETD            | Standard: 50mK ≤ 69mK  
(50mK means that temperature change is 0.05°C) |
| Accuracy        | ±0.5°C (2.5 to 5m) |
| Object temperature range | High sensitivity: -40 to 160°C  
Low sensitivity: -40 to 550°C |
| Detection Area  | Up to 20 boxes |
| Encapsulation   | Body: IP66 / IK06  
Lens: IP66 / IK04 (B016 equal to IK06) |

### ST102-CS Box PC

<table>
<thead>
<tr>
<th>CPU</th>
<th>8th Gen Intel® Core™ i3-8100T Processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>DDR4 SODIMM 4GB</td>
</tr>
<tr>
<td>Storage</td>
<td>1 x 2.5” SATA 3.0 Drive bay</td>
</tr>
</tbody>
</table>
| I/O              | 2 GbE, 6 USB, 2 x DP++, 1 x HDMI,  
1 x optional slim DDD bay |
| Power            | 12V DC power input |
| Operating Temperature | -5 to 55°C |
| Operating System | Windows 10 IoT Enterprise |
| Warranty         | Long Life Cycle Support, 2 years warranty |
DFI's Smart Thermal Imaging System iMage-F is an advanced package for multi-face fever detection (face detection only). iMage-F pairs DFI’s ST102-CS industrial computer powered with a thermal camera, detecting up to 30 people at once.

### Multi-Face Fever Detection

- **Resolution** | RGB: 2688 x 1520; IR: 384 x 288 pixels
- **Image Streaming Format** | H.264 / H.265 / MJPEG
- **Encapsulation** | IP66
- **Thermal Sensitivity/NETD** | ~40 mK
- **Accuracy** | ±0.5°C (2.5 to 5m)
- **Object temperature range** | 30°C to 45°C
- **Detect object** | Human face temperature, up to 30 persons
- **Image Modes** | Thermal, Visual, MSX (IR-image with enhanced detail presentation)

Once temperature abnormality is detected, the iMage-F issues real-time alarms — CCTV video pop-up, warning sound, email notification, and etc. The iMage-F with a friendly UI, provides open APIs to integrate 3rd party systems, and help query information of certain events along with images.

### ST102-CS Box PC

- **CPU** | 8th Gen Intel® Core™ i3-8100T Processor
- **Memory** | DDR4 SODIMM 4GB
- **Storage** | 1 x 2.5” SATA 3.0 Drive bay
- **I/O** | 2 GbE, 6 USB, 2 x DP++, 1 x HDMI, 1 x optional slim ODD bay
- **Power** | 12V DC power input
- **Operating Temperature** | -5 ~ 55°C
- **Operating System** | Windows 10 IoT Enterprise
- **Warranty** | Long Life Cycle Support, 2 years warranty