

Smart Thermal Imaging Solution

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.

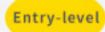


EB100-KU Thermal Imaging System Alarm Functions

VMS Embedded

- Quick Search
- Heterogeneous Integration

iMage-E





EB100-KU pairs with Thermal Camera

- 1.Up to 3 detection areas (any over-heat objects can be detected)
- 2. Detection distance:

1 to 1.5m

iMage-M





EB100-KU pairs with Thermal Camera

- 1.Up to 20 detection areas (any over-heat objects can be detected)
- 2. Detection distance:
 - 2.5 to 5m
- Extended Applications: fire detection, electrical fence, etc.

iMage-F

Advanced Multi-face



EB100-KU pairs with Thermal Camera

- 1. Face specific version for 1 to 10 detection
- Detect human face, up to 10 people at once
- 3. Detection distance:
 - 0.8 to 1.5m









DFI's Smart Thermal Imaging System iMage-E is an entry-level package for single-person fever detection, featuring DFI's EB100-KU embedded computer and a thermal camera that simultaneously detects up to 3 areas within 1 to 1.5 meters.

Single-Person Fever Detection

Resolution | RGB: 640 x 480; IR: 80 x 60 pixels

Image Streaming Format | Motion JPEG / MPEG / H.264

Min. Illusion | Minimum 10 Lux without illuminator

Encapsulation | IP67

Thermal Sensitivity/NETD | <0.10°C@+30°C (+86°F)/100mK

Accuracy $| \pm 0.3^{\circ}C (<1m) \\ \pm 0.8^{\circ}C (1 \text{ to } 1.5m)$

Object temperature range | -10°C to +150°C (14°F to 302°F)

Detection Area | Up to 3 boxes

Image Modes | Thermal, Visual,

MSX (IR-image with enhanced detail presentation)

Communication and Power | Ethernet 100Mbps, powered over Ethernet,

PoE IEEE 802.3af class 0

Operating Temperature | 0°C to +50°C (32°F to +122°F)

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

EB100-KU Box PC

CPU | Intel Core i3-6100U Processor 2.3GHz

Memory | DDR4 2666MHz SODIMM 8GB

System Drive | 1 x M.2 2280

I/O | 2x HDMI 2.0, 4x USB 3.0, 2x USB 2.0, 2x GbE

Power | 12VDC power input

Operating Temperature | -20 ~ 40° C

Operating System | Windows 10 IoT Enterprise 2019 LTSC

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 EB100-KU 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 13.5 µ m)

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, <79mK (50mK means that temperature change is 0.05°C)

Accuracy $\mid \pm 0.5^{\circ}C(2.5 \sim 5m)$

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)

38.2° C

EB100-KU Box PC

CPU | Intel Core i5 - 6300U Processor 2.4GHz

Memory | DDR4 2666MHz SODIMM 8GB

System Drive | 1 x M.2 2280

I/O | 2x HDMI 2.0, 4x USB 3.0, 2x USB 2.0, 2x GbE

Power | 12VDC power input

Operating Temperature | -20 ~ 40° C

Operating System | Windows 10 IoT Enterprise 2019 LTSC

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 EB100-KU industrial computer powered by Core-i5 CPU with a thermal camera, detecting up to 10 people at once.

Multi-Face Fever Detection

RGB: 2688 x 1520; Resolution IR:160 x 120 pixels

Image Streaming Format | H.264 / H.265 / MJPEG

Thermal Sensitivity/NETD | <40mK

Accuracy $\pm 0.5^{\circ}$ C (0.8 to 1.5m)

Object temperature range | 30°C to 45°C

Detect object | Human face temperature, up to 10 persons

Thermal, Visual,

MSX (IR-image with enhanced detail presentation)

Encapsulation | IP66

Image Modes

EB100-KU Box PC

CPU | Intel Core i5 - 6300U Processor 2.4GHz

DDR4 2666MHz SODIMM 8GB Memory

System Drive 1 x M.2 2280

> 2x HDMI 2.0, 4x USB 3.0, 2x USB 2.0, 2x GbE 1/0

Power 12VDC power input

-20 ~ 40° C Operating Temperature

> Windows 10 IoT Enterprise 2019 LTSC Operating System

> > Warranty Long Life Cycle Support, 2 years warranty



Once temperature abnormality is detected,

the iMage-F issues real-time alarms — CCTV

video pop-up, warning sound, email notifi-

cation, and etc. The iMage-M with a friendly

party systems, and help query information

UI, provides open APIs to integrate 3rd

of certain events along with images.