

FMX 640 S SERIES IR CAMERA



The FMX 640 S Series IR Camera is a 7.5 Hz imager with unmatched sensitivity and accuracy. It is a 640 x 512 radiometric imager operating on 10 W of power via a PoE (Power over Ethernet) connection. The device provides real-time radiometric data streamed directly to any desktop, laptop, or embedded system. It is designed to be used adjunctively with other diagnostic tools. Includes IR Flash Software version 1.0 for analysis and report building. Windows and Linux software, drivers and SDKs are available for custom applications.

Features

- Unmatched image sensitivity
- Multi-device linking
- Radiometric data streaming
- Integrates into embedded systems
- Windows and Linux software
- Small size
- Light weight
- Low power < 10 W
- Drivers and SDK available

Specifications

- **Detector Array:** UFPA (VOx)
- **Pixel Pitch:** 17 μ m
- **FOV:** lens dependent
- **Measurement Distance:** lens dependent
- **Pixel Resolution:** 640 x 512
- **Spectral Band:** 7 μ m to 14 μ m
- **Thermal Sensitivity (NETD):**
< (30 mK) 0.03 °C at 30 °C (86°F)
- **Frame Rate:** 7.5 Hz
- **Dynamic Range:** 14-bit
- **Temperature Range:** 25 °C to 45 °C (77 °F to 113 °F)
- **Operation Range:** 0 °C to 50 °C (32 °F to 122 °F)
- **Storage Range:** -40 °C to 80 °C (-40 °F to 176 °F)
- **Humidity:** 5% to 95% non-condensing
- **Accuracy:** \pm 0.2 °C
- **Pixel Operability:** > 99 %
- **Shock/Vibration:** 75 G/4 G
- **Dimensions (without lens):**
157 mm x 70 mm x 70 mm (L x W x H \pm .5 mm)
(6.18" x 2.76" x 2.76" (L x W x H \pm 0.02"))
- **Power:** 5 V DC 2 A, < 10 W
- **Weight (without lens):** < 520 g (1.15 lbs)
- **Interface:** RJ45/Ethernet + PoE
- **Video:** raw data
- **Emissivity Correction:** 0.01 to 1.0
- **IP Rating:** IP 54
- Built-in shutter

Applications

- Skin temperature measurement
- Hospital healthcare procedures
- Healthcare robotics
- Radiometric imaging
- Scientific research
- Breast imaging
- Airport screening
- Sub-acute healthcare settings

Options/Lenses

- Optional: 1/4"-20 tripod
- Temperature reference source
- 12.5 mm Manual focus lens
(50° x 37.5° FOV, +64 g (2.26 oz))
- 25 mm Athermalized focus lens
(24.8° x 18.6° FOV, +50 g (1.76 oz))



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THIS DEVICE IS INTENDED FOR ADJUNCTIVE USE WITH OTHER CLINICAL DIAGNOSTIC PROCEDURES TO MEASURE HUMAN BODY TEMPERATURE VIA NON-CONTACT SKIN MEASUREMENTS VISUALIZED FROM THE HUMAN FACE. NOT MEANT FOR STANDALONE CLINICAL DIAGNOSTIC PROCEDURES OR TO TREAT OR DIAGNOSE PATIENTS.