

# 8640 P SERIES IR CAMERA



The ICI 8640 P Series IR Camera offers unmatched image sensitivity and accuracy in a 640 x 512 radiometric imager. With less than 5 in<sup>3</sup> in overall dimension the camera fits in the tightest of areas. The P Series IR Camera operates on less than 1.2 W of power, via a USB Mini-B to USB 2.0, providing real time radiometric data streamed directly to any desktop, laptop, tablet or embedded system. Windows and Linux software, drivers and SDK are available for any and all custom applications. Includes IR Flash software for skin temperature analysis.

## Features

- Unmatched image sensitivity
- Multi-device linking
- Radiometric data streaming
- Integrates into embedded systems
- Windows and Linux software
- Small size
- Light weight
- Low power < 1.2 W by USB
- Drivers and SDK available

## Applications

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

## Specifications

- **Detector Array:** FPA (VOx)
- **Pixel Pitch:** 17  $\mu$ m
- **FOV:** lens dependent
- **Measurement Distance:** lens dependent
- **Pixel Resolution:** 640 x 512
- **Spectral Band:** 7  $\mu$ m to 14  $\mu$ m
- **Thermal Sensitivity (NETD):**  
< (30 mK) 0.03 °C at 30 °C (86 °F)
- **Frame Rate:** 30 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 (0.36 °F)
- **Pixel Operability:** > 99 %
- **Shock/Vibration:** 75 G/4.3 G
- **Dimensions (without lens):**  
44.5 mm x 44.5 mm x 46.5 mm (L x W x H  $\pm$  0.5 mm)  
(1.75" x 1.75" x 1.83" (L x W x H  $\pm$  0.02"))
- **Power:** 5 V DC 500 mA, < 1.2 W
- **Weight (without lens):** 72 g (2.5 oz)
- **Interface:** USB Mini-B
- **Video:** raw data
- **Emissivity Correction:** 0.01 to 1.0
- **IP Rating:** IP 54
- Built-in shutter
- Aluminum enclosure

## 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.**