

8320 S SERIES IR CAMERA



The ICI 8320 S Series IR Camera offers unmatched image sensitivity and accuracy in a 336 x 256 radiometric imager. With less than 5 in³ in overall dimension, the S Series IR Camera fits in the tightest of areas. It can be integrated into metal detectors and existing security systems. The imager operates on less than 1 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 W by USB
- Drivers and SDK available

Specifications

- **Detector Array:** FPA (VOx)
- **Pixel Pitch:** 17 μ m
- **FOV:** lens dependent
- **Measurement Distance:** lens dependent
- **Pixel Resolution:** 336 x 256
- **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 (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 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

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
- 8 mm Manual focus lens
(40° x 30° FOV, +50 g (+1.76 oz))
- 12.5 mm Manual focus lens
(25° x 18.8° FOV, +64 g (+2.26 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.