

# ICI | 8320 S-Series



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[www.infraredcamerasinc.com](http://www.infraredcamerasinc.com) | [sales@infraredcamerasinc.com](mailto:sales@infraredcamerasinc.com)

INFRARED CAMERAS INC.  
2105 W. Cardinal Dr.  
Beaumont, TX 77705

Phone: (409) 861-0788  
Toll Free: (866) 861-0788

**We are IR™**

# ICI | 8320 S-Series

The ICI 8320 S-Series infrared camera offers unmatched image sensitivity and accuracy in a 320x240 radiometric imager. With less than 2 in<sup>3</sup> in overall dimension the 8320 fits in the tightest of areas. The ICI 8320 operates on less than 1 W of power, via a USB 2.0 connection, 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. Integrates into the Sensor Control Module for UAV applications. Includes IR Flash version 1.0 Software.



## 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

## Applications

- Process Control
- Robotics
- Industrial Vision Systems
- Medical Radiometric Imaging
- Aerial Radiometric Imaging
- UAV Integration
- Scientific Research
- Building Automation
- Security Monitoring



## Specifications

- **Detector Array:** FPA (VOx)
- **Pixel Pitch:** 17  $\mu$ m
- **Pixel Resolution:** 320x240
- **Spectral Band:** 7  $\mu$ m to 14  $\mu$ m
- **Thermal Sensitivity (NETD):**  
< 0.02 °C at 30 °C (20 mK)
- **Frame Rate:** 9 Hz P-Series
- **Dynamic Range:** 14-bit
- **Temperature Range:**  
Standard: -20 °C to 120 °C  
Optional: 0 °C to 500 °C
- **Operation Range:** -40 °C to 80 °C
- **Storage Range:** -40 °C to 70 °C
- **Accuracy:**  $\pm$  1 °C
- **Pixel Operability:** > 99 %
- 75 G Shock / 4 G Vibration
- **Dimensions (without lens):**  
45 x 45 x 39 mm (H x W x D  $\pm$  .5 mm)
- **Power:** < 1 W
- **Weight (without lens):** 37 g
- USB 2.0 for Power & Data
- Built in Shutter
- Aluminum Enclosure

## Options & Accessories

- 4.1 mm Manual Focus Lens (80° x 60° FOV, +116 g)
- 5 mm Manual Focus Lens (58° x 44.5° FOV, +44 g)
- 8 mm Manual Focus Lens (40° x 30° FOV, +50 g)
- 9 mm Athermalized Focus Lens (35° x 26° FOV, +40 g)
- 12.5 mm Manual Focus Lens (25° x 18.8° FOV, +64 g)
- 16.7 mm Athermalized Focus Lens (18.8° x 14° FOV, +25 g)
- 25 mm Athermalized Focus Lens (12.4° x 9.3° FOV, +50 g)
- 30 mm Manual Focus Lens (10° x 7.5° FOV, +100 g)
- 35 mm Athermalized Focus Lens (8.8° x 6.6° FOV, +100 g)
- 50 mm Manual Focus Lens (6.2° x 4.7° FOV, +170 g)
- 100 mm Manual Focus Lens (3.1° x 2.4° FOV, +565 g)
- Sensor Control Module

