

# MIRAGE 640 P-SERIES

The Mirage 640 P-Series provides outstanding electronics with the most sensitive detector available anywhere. The 640 x 512 Indium Antimonide detector provides the very best in quantum efficiency when compared with any other detector material. Our heavy duty long life Stirling cooler was initially designed for space applications. Its design life is double that of most coolers or cameras in the same class. Combined with our IR Flash real time analysis software and you have a very powerful tool.

## Features

- UAV/UAS integration
- Collect radiometric temperature data
- Integrates with sensor control module
- Unparalleled image quality
- USB 2.0 output
- Light weight, compact, & portable
- Low power
- Includes IR Flash software

## Specifications

- **Detector Array:** Cooled Indium Antimonide
- **Pixel Pitch:** 15  $\mu\text{m}$
- **FOV:** lens dependent
- **Measurement Distance:** lens dependent
- **Pixel Resolution:** 640 x 512
- **Spectral Band:** Midwave: 3  $\mu\text{m}$  to 5  $\mu\text{m}$  or 1.5  $\mu\text{m}$  to 5  $\mu\text{m}$
- **Thermal Sensitivity (NETD):** < 0.012  $^{\circ}\text{C}$  at 30  $^{\circ}\text{C}$  (12 mK)
- **Frame Rate:** 30 Hz P-Series  
Optional: 9 Hz S-Series
- **Dynamic Range:** 14-bit
- **Temperature Range:** -55  $^{\circ}\text{C}$  to 350  $^{\circ}\text{C}$
- **Operation Range:** -40  $^{\circ}\text{C}$  to 80  $^{\circ}\text{C}$
- **Storage Range:** -40  $^{\circ}\text{C}$  to 70  $^{\circ}\text{C}$
- **Humidity:** 5% to 95% non-condensing
- **Accuracy:**  $\pm 1$   $^{\circ}\text{C}$
- **Pixel Operability:** > 99 %
- **Shock/Vibration:** 20 G/5.8 G
- **Dimensions (without lens):** 131 mm x 96 mm x 111 mm  
(L x W x H  $\pm .5$  mm)
- **Power:** 12V (cooling engine)
- **Weight (without lens):** < 765 g
- **Interface:** USB 2.0
- Aluminum enclosure

## Applications

- Scientific research
- Medical imaging
- Printed circuit boards
- Micro electronics
- Laser imaging
- DWDM
- Security

## Options & Software

- Optional: 9 Hz S-Series
- Optional: Ethernet
- 7 mm Manual lens with 57 $^{\circ}$  FOV
- 13 mm Manual lens with 42 $^{\circ}$  FOV
- 25 mm Manual lens with 26 $^{\circ}$  FOV
- 50mm Manual lens with 13 $^{\circ}$  FOV
- 100 mm Manual lens with 6 $^{\circ}$  FOV at F2.3
- IR Flash Software
- Windows 32-bit SDK
- Linux SDK (x86, x64 and ARM)



Mirage 640 P-Series

ICI cameras all fall under US Federal Law and Export Control.