

# MIRAGE HC OPTICAL GAS IMAGER

Featuring the latest technological advancements, the Mirage HC infrared camera is the world's only imager capable of delivering the optimum handheld or aerial solution. Our infrared gas camera not only detects Methane and other HydroCarbon gases with ease but also collects radiometric data to deliver accurate temperature measurements. The Mirage HC's Easy-to-Use interface allows for intuitive operation and has low power consumption, less than 8 W. Weighing in at less than 765 g without a lens, it is compact and portable for handheld use or UAV integration. Users can quickly pinpoint failures with clear vision of leaking gases. Thermal images produced are a superb 640 x 512 resolution. Includes ICI's IR Flash Pro Software, and integrates with ICI's UAV Sensor Control Module.

## Features

- Unmatched gas detection
- UAV/UAS integration
- Collect radiometric temperature data
- Integrates with sensor control module
- Unparalleled image quality
- Light weight, compact, & portable
- Low power (< 8 W)
- Includes IR Flash software

## Specifications

- **Detector Array:** Cooled MWIR InSb
- **Pixel Pitch:** 15  $\mu$ m
- **FOV:** lens dependent
- **Measurement Distance:** lens dependent
- **Pixel Resolution:** 640 x 512
- **Spectral Band:** 3.2  $\mu$ m to 3.4  $\mu$ m
- **Thermal Sensitivity (NETD):** < 0.014  $^{\circ}$ C at 30  $^{\circ}$ C (14 mK)
- **Frame Rate:** 30 Hz P-Series  
Optional: 9 Hz S-Series
- **Dynamic Range:** 8-bit or 14-bit
- **Temperature Range:** -40  $^{\circ}$ C to 80  $^{\circ}$ C  
High Temperature: 0  $^{\circ}$ C to 350  $^{\circ}$ C
- **Operation Range:** -40  $^{\circ}$ C to 80  $^{\circ}$ C
- **Storage Range:** -40  $^{\circ}$ C to 70  $^{\circ}$ C
- **Humidity:** 5% to 95% non-condensing
- **Accuracy:**  $\pm$  1  $^{\circ}$ 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
- **Weight (without lens):** < 765 g
- **Interface:** USB 2.0
- **Video:** NTSC or PAL
- Shutterless
- Aluminum enclosure

## Applications

- Petrochemical (midstream)
- Industrial vision systems
- Aerial radiometric imaging
- Gas leak detection
- Aerial/UAV/UAS inspections
- Handheld applications
- Pipeline inspections
- Industrial monitoring
- Petrochemical monitoring
- Process control
- Scientific research
- Production processing/packaging

## Gases Detected

- Benzene - 3.5 g/hr
- Ethanol - 0.7 g/hr
- Ethylbenzene - 1.5 g/hr
- Heptane - 1.8 g/hr
- Hexane - 1.7 g/hr
- Isoprene - 8.1 g/hr
- Toluene - 3.8 g/hr
- Methanol - 3.8 g/hr
- MEK - 3.5 g/hr
- Pentane - 3.0 g/hr
- Xylene - 1.9 g/hr
- Butane - 0.4 g/hr
- Ethane - 0.6 g/hr
- Methane - 0.75 g/hr
- Propane - 0.4 g/hr
- Ethylene - 4.4 g/hr
- Propylene - 2.9 g/hr
- MIBK - 2.1 g/hr
- Octane - 1.2 g/hr
- 1-Pentene - 5.6 g/hr

## Options & Software

- Optional: 9 Hz S-Series
- IR Flash Software
- Windows 32-bit SDK
- Linux SDK (x86, x64 and ARM)

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