

# EXPLOSION PROOF GAS IMAGING

## THE OPTIMUM GAS LEAK SOLUTION

Many companies work intensively with Methane, organic gases, and chemical compounds. ICI's Gas DetectIR VOC quickly visualizes and pinpoints gas leaks and is useful in petrochemical, oil & gas, refinery, rescue, and fire fighting applications. Gas DetectIR series cooled cameras are extremely important tools for tracing potential faults and for limiting exposure to invisible and potentially harmful chemicals. The device is ATEX certified as explosion proof.



Gas DetectIR VOC



## CERTIFIED PROTECTIONS

The Gas DetectIR VOC is ATEX certified as explosion proof. It has additional IP54 and IEC 529 ratings to protect against dust interference and is water resistant.



## GAS LEAK DETECTION

The Gas DetectIR VOC has unmatched gas leak detection capabilities. It is lab tested with the ability to detect over 18 gases including Methane and other organic gases. Includes trace mode to highlight gases.



180° Rotation

## BETTER VIEWING EXPERIENCE

The ergonomic tilting viewfinder and rotating 3.5", 640 x 480 LCD screen is designed to help thermographers detect gas leaks quickly and comfortably at nearly any angle. It is best for diagnosing leaks found near high temperature components.



The Gas DetectIR VOC is an ATEX certified explosion proof infrared camera capable of delivering the optimum solution for the detection of methane and other organic gases. Its Type II MWIR cooled detector displays 320 x 256 pixels on a rotating 3.5" (640 x 480) LCD screen and tilting high resolution viewfinder for higher resolution imaging. Easy to use interface allows for intuitive operation. The Gas DetectIR VOC has 60 seconds of voice annotation, which is stored together with the image. Additionally, it is compact and portable, enabling users to quickly pinpoint the failure and give clear vision of leaking gases. Includes ICI Reporting Software.

## Features

- Unmatched gas detection
- ATEX certified - explosion proof
- Trace Mode for better visibility
- Detects over 18 gases
- Multiple video output options
- Rotating 3.5", 640 x 480 LCD screen
- Tilting high-definition viewfinder
- 60 Seconds voice annotation per image
- Compact/portable

## Gases Detected

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

## Options & Accessories

- ICI Reporting Software
- Windows 32-bit SDK
- Linux SDK (x86, x64 and ARM)

## Specifications

- **Pixel Resolution:** 320 x 240
- **Accuracy:**  $\pm 2^{\circ}\text{C}$  ( $\pm 3.6^{\circ}\text{F}$ ) or  $\pm 2\%$
- **Temperature Range:**  $-20^{\circ}\text{C}$  to  $160^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $320^{\circ}\text{F}$ )
- **Operation Range:**  $-15^{\circ}\text{C}$  to  $50^{\circ}\text{C}$  ( $5^{\circ}\text{F}$  to  $122^{\circ}\text{F}$ )
- **Storage Range:**  $-40^{\circ}\text{C}$  to  $70^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$  to  $158^{\circ}\text{F}$ )
- **Detector Array:** Type II SLS
- **Focus:** electric or manual
- **FOV:**  $24^{\circ} \times 18^{\circ}$
- **IFOV:** 1.31 mrad
- **Spectral Band:**  $3\ \mu\text{m}$  to  $5\ \mu\text{m}$
- **Response Time:** 0.001 ml/s
- **Thermal Sensitivity (NETD):**  
< (15 mK)  $0.015^{\circ}\text{C}$  at  $30^{\circ}\text{C}$  ( $86^{\circ}\text{F}$ )
- **Frame Rate:** 50 Hz
- **Dynamic Range:** 16-bit
- **Humidity:** 10% to 95% non-condensing
- **Pixel Operability:** > 99 %
- **Shock/Vibration:** 25 G/2.5 G
- **Dimensions (without lens):**  
 $292\ \text{mm} \times 148\ \text{mm} \times 136\ \text{mm}$  (L x W x D  $\pm 0.5\ \text{mm}$ )  
( $11.50'' \times 5.83'' \times 5.35''$  (L x W x H  $\pm 0.02''$ ))
- **Power:** 12V DC/AC adapter
- **Battery:** Li-ion, rechargeable/replaceable
- **Operation Time:**  $\geq 3$  Hours
- **Charging Time:** 3 Hours
- **Start Up Time:**  $\leq 5$  minutes
- **Weight:**  $\leq 2.6\ \text{kg}$  (5.73 lbs)
- **Interface:** USB 2.0
- **View Finder:** color OLED
- **Video Format:** IRV or AVI
- **Video Output:** S-video/HDMI
- **Image Format:** IR IMA (with data) + visible JPG
- **Image Polarity:** 6 options
- **Memory:** SD Card (up to 32 GB)
- **Screen:** 4:3, 3.5" LCD screen, 640 x 480
- **Digital Camera:** 5 MP
- **Zoom:** 1x - 8x continuous
- **Emissivity Correction:** 0.1 to 1.0
- **Voice Annotation:** 60 seconds per image
- **Protection:** IP54, IEC 529, ATEX - explosion proof
- **Laser:** Class II 635 nm, < 1 mW
- **Internal non-uniformity correction (NUC)**