EyeCGas® FOR VOC

FUGITIVE EMISSIONS DETECTION CAMERA
EyeCGas®: A design formed by the demands of the industry

- Specially designed for application in the natural gas, oil and petrochemical industries, taking into consideration the requirements of the users.
- Very sensitive and detects smaller leaks than the existing optical imagers’ portable solutions.
- Certified for use in hazardous environments (Class 1, Div. 2 and ATEX II) allowing the inspection of hazardous locations in the plant.
- Implements an internal video and audio recording device.
- Features a large color LCD display for image and text display.
- Rugged and durable by design to be used as a tool in the field.
- Complies with EPA’S OOOOa regulation requirements.

Gas leak detection equipment is vital to keeping your employees, environment and product safe. Quickly find methane and volatile organic compound (VOC) leaks. Save time searching for fugitive gas leaks, and feel confident in the knowledge that your search was far more effective than ever before possible.
High sensitivity to a spectrum invisible to the human eye makes EyeCGas® a critical tool in fugitive gas leak detection. Even from a distance, a user will easily see the exact location of a leak.

Field productivity
Robust, ruggedized and hazardous environment certified, EyeCGas simplifies and broadens opportunities for use inside the facility limits without the need of a hot work permit.

No more guesswork
The EyeCGas® includes a digital CCD camera for fast recognition of the components being inspected or leaking, and GPS coordinates overlay for location assurance.

Powerful but simple
The EyeCGas® allows the inspection of vast areas in a plant with an automated and simple user interface, visualizing the infrared image on a large color LCD.

Specialized
EyeCGas® is an infrared camera specially designed for the Petrochemical and Gas & Oil market requirements for gas detection and Smart LDAR and EPA 0000a compliance.

Safety
- UL1604, Electrical Equipment for Use in Class I and II, Division 2, and Class III (Classified) Locations.
- CSA C22.2 No. 213-M1987, Non Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations.
- ANSI/ISA-12.12.01 - Non-incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III Hazardous (Classified) Locations.
- ATEX II 3G Ex nL IIC T6.

OPGAL:
Seeing beyond the visible for a clean global environment
Opgal Optronic Industries, a leading global manufacturer, leverages more than 30 years of field-proven thermal imaging experience and excellence into the design and development of IR engines & cameras. The EyeCGas® camera brings Opgal's cutting edge technology to the natural gas and petrochemical markets.
## EyeCGas - Gas Imaging Camera - Specifications

### Imaging Performance

#### Thermal Imager
- **Thermal Sensitivity**: $< 12$ mK @ 25°C
- **Detector Type**: Cooled High Sensitivity MCT, 320 x 240 pixels
- **F/No.**: 1.1
- **Field of View**: 18.5° x 13.6° with 30mm lens
- **Focus Near**: $< 0.5 m$
- **Focusing**: Manual
- **Digital Zoom**: x2, x4

#### Digital Video Camera
- **Embedded Digital Camera**: VGA, Fixed Focus, for Situational Awareness

### Gas Detection
- **Spectral Range**: 3.2µm to 3.4µm
- **Gases Detected**: Methane, Acetic acid, Benzene, Butadiene, Butene, Butane, Dimethyl-Benzene, Ethane, Ethylene, Ethyl benzene, Ethylene oxide, Hexane, Heptane, Isobutylene, Isopropyl alcohol, Isoprene, Methanol, MEK Methyl Ethyl Ketone, Octane, Pentene, Propane, Propanal, Propene, Propylene, Propylene oxide, Styrene, Toluene, Xylene

#### Gas Detection Imaging Modes
- Auto and Enhanced Modes including background selection for standard very hot background temperatures

### Power Input
- **Voltage**: 12 VDC
- **Power Consumption**: 14.4 W
- **Battery Life**: more than 4 hours of continuous operation

### Physical Characteristics
- **Weight (without battery)**: 2.37kg (5.22lbs)
- **Color**: Grey and Black
- **Size in (LxHxW)**: 9” x 4.3” x 5.1” (230mm x 110mm x 130mm)
- **Tripod mounting**: UNC 1/4”, rotation safe

#### Display
- **Display Unit**: 3.5” Color LCD 640 x 480

### Environmental Conditions
- **Operating Temperature Range**: -20°C to +50°C
- **Storage Temperature Range**: -40°C to +70°C
- **Temperature and Humidity**: IEC 60068-2-30 Temp. +25°C / +40°C Humidity 95% RH
- **EMC/EMI**:
  - FCC 47 CFR part 15 subpart B - Radiated Emissions
  - EN 61000-6-4 : 2007 class A - Radiated Emissions
  - EN 61000-6-2 : 2005 class A - Immunity to Electrostatic Discharge (ESD)
  - EN 61000-6-2 : 2005 class A - Radiated Immunity to RF E
  - EN 61000-6-2 : 2005 class A - Radiated Immunity to Power Frequency Magnetic Field
- **Vibration**: 2.4 GRMS Random Vibration
- **Water and Dust Protection**: IP66 - Blowing Dust Test, IP65 - Jetting Water
- **HALT - High Accelerated Life Test**: Vibration level: Max temp: 55°C, Min temp: -20°C

### Environmental Conditions when Packed in Carrying Case
- **Free Fall (Drop) Test**: ASTM-D 4169-06 Schedule A
- **Loose cargo vibration Test**: ASTM-D 4169-08 Schedule F Test method D999
- **Vibration**: ASTM-D 4169-08 Schedule F Test method D999

### Digital Video and Audio Recording
- **Visual Video, IR video and Audio Recording**: Digital recorder build-in with connection to PC via USB 2
- **Storage Capacity**: Up to 8 hours of MPEG4/H.264 in ENH mode of video & audio recording in a 16 Gbyte SD card (Built In)
- **Picture Recording**: On file download, the Utility software will create a picture of the first frame of the video

### Other Features
- **Connectivity**: Bluetooth, USB 2
- **GPS**: Low power, external device, Bluetooth com. to camera, accuracy <3m, 66 satellites, sensitivity up to -165dBm

### Supplied Accessories
- **Batteries**: (3), Tri Battery Charger, USB Cable, Headset, Neck Strap, Glare Shield, Carrying Case, GPS

### Optional Accessories
- **75mm F#1.2 Lens - FOV 7.3°x5.5°- P/N 8G9T7500A**