

# EyeCGas<sup>®</sup> CO<sub>2</sub>

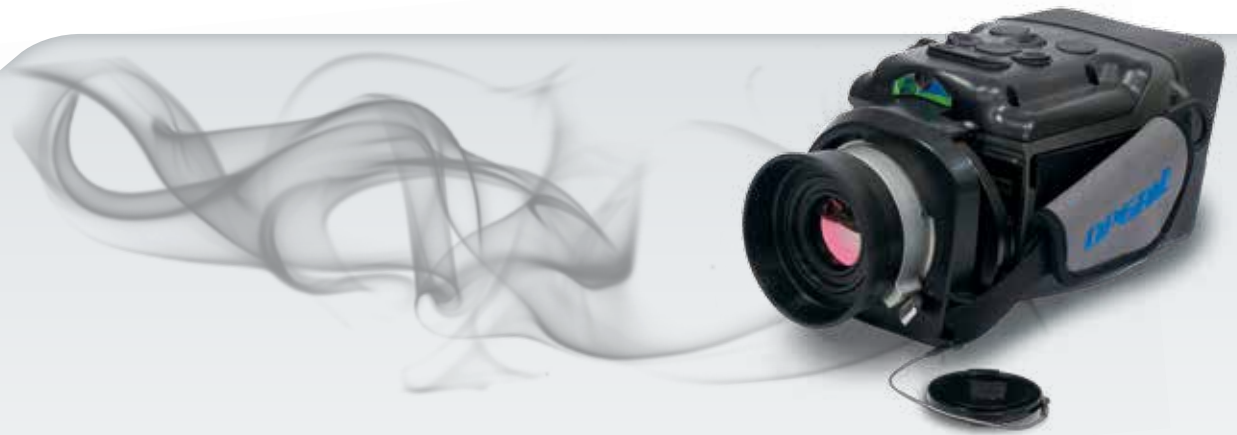
OPTICAL GAS IMAGING CAMERA



**OPGAL<sup>2</sup>**  
Beyond the Visible



With the EyeCGas® CO<sub>2</sub> OGI camera, you can safely and easily locate very small concentrations of CO<sub>2</sub> leaks, whether as a tracer gas used to find leaks during plant and Enhanced Oil Recovery (EOR) machinery inspections, or to verify completed repairs. Save time with fast and accurate detection, and cut operating downtime to a minimum while avoiding fines and lost profits.



Visual Image



Normal Mode

Leak from a power generator valve



Enhanced Mode

See even more in Enhanced Mode

## EyeCGas® CO<sub>2</sub>

Designed for the oil & gas, utilities, nuclear energy, and steel industries:

- **Instant ROI** - Can cut downtime from 3+ days to 1 day from plant shutdown to final leak repair verification.
- **High sensitivity detector** - Can pinpoint tiny CO<sub>2</sub> tracer gas leaks in Hydrogen, Nitrogen, and dry air at less than 3% concentration in generation, processing, and manufacturing operations.
- **Certified for use in hazardous environments** - Class 1, Div. 2, ATEX II.
- **Repair confirmation** - Gives visual verification of completed repairs so operations can be safely resumed.
- **Intelligently designed** - Provides up to 6 hours of visual and IR video with audio recording on the same file.
- **Snapshot feature** - When downloading the files from the camera, Artsoft will create a snapshot from the first frame of each video for easy reference and documentation.
- **Large color LCD screen** - With intuitive user interface.
- **IP65, rugged and durable** - Designed for use in the field.



## High sensitivity to a spectrum invisible to the human eye makes EyeCGas® CO<sub>2</sub> a critical Optical Gas Imaging tool for fugitive emissions detection and leak repair verification.

Instantly visualize the exact location of CO<sub>2</sub> leaks, even at a distance.



### Specialized

EyeCGas® CO<sub>2</sub> is an infrared camera specially designed for high sensitivity CO<sub>2</sub> detection for oil & gas, utilities, nuclear energy, and steel market requirements.



### Field productivity

Ruggedized and hazardous environment certified, the EyeCGas® CO<sub>2</sub> broadens opportunities for use within the facility limits while maintaining safety, without the need of a “hot work” permit.



### Powerful but simple

The EyeCGas® CO<sub>2</sub> allows for fast inspection of vast areas with a simple and intuitive user interface.



### No more guesswork

The EyeCGas® CO<sub>2</sub> includes a large LCD display and a digital CCD camera for fast recognition of the components being inspected or leaking.



### Safety

- UL1604 - Electrical Equipment for Use in Class I & II, Division 2, & 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 & II, Division 2 & 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 Ltd. is a leading global provider of innovative infrared thermal imaging systems and advanced vision and surveillance solutions. Using state-of-the-art thermal and active-imaging technologies, Opgal® leverages advanced electro-optics and image processing expertise to create high performance, versatile visualization hardware and software products. The EyeCGas® CO<sub>2</sub> camera brings Opgal's® cutting edge technology to the oil & gas, utilities, nuclear energy, and steel markets.

# EyeCGas® CO<sub>2</sub> - Optical Gas Imaging Camera - Specifications

Imaging Performance	
<b>Thermal Imager</b>	
Thermal Sensitivity	< 12mK@ 25°C
F#	1.1
Field Of View	18.5° x 13.6° with 30mm lens
Focus Near	< 0.5m
Focusing	Manual
Digital Zoom	x2, x4
<b>Digital Video Camera</b>	
Embedded Digital Camera	VGA, Fixed Focus for Situational Awareness
<b>Detector</b>	
Type	Cooled High Sensitivity, 320 x 240 pixels
Spectral Filter	4.2µm to 4.4µm
Spectral Range	3µm to 5µm
<b>Power Input</b>	
Voltage	12 VDC
Power Consumption	14.4 W
Battery Life	4 Hours Continuous
<b>Physical Characteristics</b>	
Weight (with battery and lens)	2.5 kg (5.5 lbs)
Color	Grey and Black
Size in (LxHxW)	9" x 4.3" x 5.1" (230mm x 110mm x 130mm)
Interface	Tripod Mounting UNC 1/4", Rotation Safe
<b>Display</b>	
Display Unit	3.5" Color LCD 640 x 480
<b>Environmental Conditions</b>	
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 610000-6-4 : 2007 class A - Radiated Emissions EN 610000-6-2 : 2005 class A - Immunity to Electrostatic Discharge (ESD) EN 610000-6-2 : 2005 class A - Radiated Immunity to RFE EN 610000-6-2 : 2005 class A - Radiated Immunity to Power Frequency Magnetic Field
Vibration	2.4 GRMS Random Vibration
Water and Dust Protection	IP65 - Blowing Dust Test IP65 - Jetting Water
HALT - High Accelerated Life Test	Vibration Level: Max Temp: 55°C, Min Temp: -20°C
Safety	EN60950-1:2006
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. 2011 edition. ATEX II 3G Ex nL IIC T6
<b>Environmental Conditions when Packed in Carrying Case</b>	
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
<b>Gas Leak Detection Performance</b>	
Operation Features	Auto Mode and Enhanced Mode including Background Selection for standard and very hot background temperatures.
Gas Detected	CO <sub>2</sub> at < 3% Concentration Rate
<b>Digital Video and Audio Recording</b>	
Video, Snapshot, and Audio Recording	Digital recorder build-in with connection to PC via USB 2.
Snapshot Capabilities	On every video a snapshot of the first frame will be recorded to a JPG file with identical video name.
<b>Other Features</b>	
Connectivity	Bluetooth, USB 2
GPS	Energy efficient, external device, bluetooth, accuracy <3m, 66 satellites, sensitivity up to - 165bBm
<b>Accessories</b>	
Supplied	Battery Set (3), Tri Battery Charger, USB Cable, Headset, Neck Strap, Glare Shield, Carrying Case
Optional	75mm F#1.2 Lens - FOV 7.3° x 5.5°- P/N 8G9T7500A



[www.eyecgas.com](http://www.eyecgas.com) | [www.opgal.com](http://www.opgal.com)

For additional information, please contact us at: [info@opgal.com](mailto:info@opgal.com)

All specifications are subject to change without notice.

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