Optical gas imaging

Opgal EyeCGas® Multi

Hand-held OGI camera for gas leak detection and quantification

4-year warranty*

Certified intrinsically safe

ANSI[1] element[2] MET[3] ATEX[4] IECEx[5]

Key features

Gas leak detection
Quick detection of methane, CO_2 and over 400 VOCs

Thermographic imaging
Temperature measurements capabilities and color pallets for better versatility

Gas quantification
Built-in or remotely operated quantification via EyeCSite software and other 3rd party devices

Wireless connectivity
Built-in Wi-Fi™, GPS, hotspot, and Bluetooth® capabilities

Multi spectral OGI
The only OGI camera with replaceable filters enabling improved Methane/VOC and CO_2 detection with the same camera

Key benefits

Meets regulatory compliance
Complies with the EPA's OOOO'a/b/c regulations, with the broadest Appendix K envelope of performance

Intrinsically safe
IECEX intrinsically safe Zone II, ANSI, CSA Class I and Class II div.2

LDAR-Ready capabilities
Integrates with various software and analyzers

Rugged and sealed
Specially designed for detecting gas leaks in the harsh conditions of the oil and gas industry

Free firmware upgrades
Receive camera upgrades and improvements free of charge

Optical gas imaging solutions

Transmission pipes
Natural gas must travel a great distance from the original well to reach its point of use. The transportation system for natural gas consists of a complex network of pipelines, all of which have to be regularly monitored and checked to ensure against leaks and faults.

Off-Shore oil rigs
Off-shore drilling rigs deal with volatile substances under extreme pressure and in a hostile environment. This entails many risks, sometimes ending in tragedy. It is crucial to monitor and reach even the most remote station regularly, to catch potential leaks before they escalate.

LNG terminals
These highly volatile sites use various equipment for handling and transporting liquefied natural gas and liquefaction, re-gasification, processing, storage, and more. Early detection can prevent major disasters and ensure proper maintenance.

Oil refineries
Gas leak detection cameras enable the quick and safe detection and visualization of fugitive emissions leaks, allowing quick detection and repair of leaks, thus helping prevent major damage and avoid fines.

* 4 years manufacturer warranty on the camera, 2 years on the sensor.

Property of:
[1] American National Standards Institute
[2] Temasek
[3] MET Labs
[4] ATEX
[5] International Electrotechnical Commission

Technical specifications

IR resolution	320 x 240 pixels
Focus	Manual Focus
Detector pitch	30 µm
Gas sensitivity	**NECL @ delta T =10°C:** Methane – 9 ppm Propane – 2.8 ppm Butane – 2.3 ppm
	Minimum Leak Rate @ delta T =10°C: Methane – 0.07 g/h Propane – 0.05 g/h Butane – 0.05 g/h
	Minimum Laboratory Leak Rate @ delta T≤2°C: Methane – 0.35 g/h Propane – 0.26 g/h Butane – 0.29 g/h
Thermal sensitivity/ NETD	<10 mK at 30°C (86°F)
Hazardous location compliance	CSA C22.2 No. 213-M1987, non-incentive electrical equipment for use in Class I, Division 2, ANSI/ ISA-12.12.01 – Class I and II, Division 2, and Class III, ATEX. Intrinsically safe for Zone 2 ratings as: Ex II 3 GD; Ex ic nA nC IIC T6 Gc; Ex ic tc IIIC T85°C DC
Gas leak detection capabilities	With spectral filter of 3.2 Mm to 3.4 Mm for VOCs gases. Detection: 400+ compounds such as: 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.
Detector and optical data	
Detector type	Focal plane array (FPA), cooled MCT
Spectral range	3.1 µm to 4.4 µm
Optical filters	Std. 3.2-3.5 µm; Long range 3.3-3.6 µm; CO_2 4.1-4.4 µm
Sensor cooling	Stirling microcooler
Digital image enhancement	High sensitivity mode (HSM), noise reduction filter
Available lenses	18° (30 mm); 7.5° (75 mm)
F-number	1.1
Image presentation	
Display	3.5" (10'equivlent using glare shield), 640 × 480 pixel, LCD
Image presentation modes	IR image, visual image, normal, enhanced and thermography
Color palettes	6 color palettes (rainbow, iron, ISO red, ISO green, grey scale and vivid)
Zoom	x2, x4, x8 and x16 (only for visible camera)
Measurement and analysis	
Measurement temperature range	-20°C to 350°C (-4°F to 662°F)
Accuracy	At Least ± 1 °C (0 – 100 °C), ± 2% (> 100 °C), ± 2°C (-20 – 0 °C)
Gas emission quantification	Built-in real-time and offline Image processing VOC gas quantification for desktop or handheld application (offline/online operation)
Accessories and apps	
Head up display	Seamless integration including voice commands with Realware® head up display
Mobile app	Android™ 10/IOS 14 and up

Communication interface and data storage	
GPS	Included, can be added to any still or video recording
Storage media	Up to 20 hours and more of video storage over a 64 GB solid state memory
Image file formats	JPG format (on available modes)
Communication interfaces	USB: Data transfer, video streaming and video images file transfer. Wi-Fi: 2.4 GHz for video streaming and file transfer. Bluetooth: Bluetooth 4.2 with other devices: RMLD, TVA2020, LDAR software etc. GPS: Built in or external
Video out	Digital video recorder build-in generates a .ts format video on all modes.
Video recording and streaming	
IR or visual video	Digital video recorder build-in generates a .ts format video on all
Radiometric IR video streaming	Over Wi-Fi
Environmental and certifications	
Operating temperature range	-20°C to 50°C (-4°F to 122°F)
Storage temperature range	-40°C to 70°C (-40°F to 158°F)
Encapsulation	IP65 (Intrinsically safe)
Drop	ASTM-D 4169-06 Schedule A
Vibration	ASTM-D 4169-08 Schedule F Test method D999
HALT	Max temp: 55°C, Min temp: -20°C
Safety	EN60950-1:2006
Additional information	
Battery type	Rechargeable Li-ion battery; 7.4 V, charger included
Battery operating time	>4.5 hours continuous operation
Battery charging time	3 hours to 95% capacity, charging status indicated by LEDs
Camera size	9" x 4.3" x 5.1" (230 x 110 x 130) mm
Camera weight	2.6 kg (5.9 lb)
Mounting interfaces	UNC ¼"-20
Warranty	4 years (detector and cooler – 2 years; batteries 1 year)
Box contents	
Packaging	Infrared camera with lens, batteries (2), battery charger, USB cable, neck strap, glare shield, carrying case, cleaning kit.

* Batteries – 1 year warranty
** IR Detector & Cooler – 2 years warranty.

The best OGI camera just got better

Relevant applications

The EyeCGas Multi OGI camera ensures quick detection of methane, CO, CO_2, and over 400 Volatile Organic Compounds (VOCs) leaks—making it the ideal tool for leak detection solutions.

It enables quantification based on VOC emissions image processing via dedicated software, whether connected to a desktop-based or field-worthy device.

Learn more at **thermofisher.com/eyecgas**