

Opgal EyeCGas 2.0 Long Range



The OPGAL™ EyeCGas™ 2.0 Long Range handheld optical gas imaging camera (OGI) is a rugged, intrinsically safe OGI camera optimized for long-distance gas-emission detection. It offers high sensitivity for methane, CO₂, and 400+ VOCs and is built to withstand harsh industrial conditions.

The system enables remote leak detection and provides quantification onboard or through EyeCSite QOGI. Its patented multi-spectral interchangeable filters enhance detection under varying environmental conditions, including humidity.

Users can stream inspections live, share results via the app, and receive ongoing software upgrades for life, all backed by a solid 4-year warranty.

Features

- **Free firmware upgrades**
OGI camera receives upgrades and improvements free of charge
- **Multi-spectral OGI**
The only OGI camera with replaceable filters enabling improved methane/VOC & CO₂ detection with the same camera
- **Thermographic imaging**
Temperature measurement capabilities and color pallets for better versatility
- **Rugged and sealed**
Especially designed for detecting gas leaks in the harsh conditions of the oil and gas industry
- **Intrinsically safe**
IECEx intrinsically safe Zone II, ANSI, CSA Class I & Class II div.2
- **Streaming**
Real-time video streaming and wireless images/videos sharing are possible with the official EyeCGas app.
- **Long-range telephoto lens**
Providing 7.5 deg Field of View for a clear image in a long distance
- **Gas quantification**
Built-in quantification or remotely operated quantification via EyeCSite software and other 3rd party devices
- **LDAR-ready capabilities**
Integrates with various software and analyzers
- **Gas leak detection**
Quick detection of methane, CO₂ and over 400 VOCs
- **Regulatory compliance**
Complies with the EPA's OOOOa/b/c regulations
- **Connectivity**
Built-in Wi-Fi, GPS, hotspot and Bluetooth capabilities



Opgal EyeCGas 2.0 Long Range

Specification	Description
IR resolution	320 x 240 pixels
Focus	Manual focus
Detector pitch	30 µm
Thermal sensitivity/ NETD	<10 mK at 30°C (86°F)
Gas sensitivity	9.0 ppm m, 0.07 g/h ($\Delta T = 10^\circ\text{C}$, 1 m/s wind speed, distance 2m (Methane)) Appendix K sensitivity 0.15 g/h ($\Delta T = 5^\circ\text{C}$ 1 m/s wind speed distance 1m (Methane))
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 filters for Methane, VOC's and Carbon dioxide 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
Supplied lenses	7.5° (75 mm); 18° (30 mm)
F-number	1.1
Image presentation	
Display	3.5" (10' equivalent using glare shield), 640 x 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 $\pm 1^\circ\text{C}$ (0 – 100°C), $\pm 2\%$ (> 100°C), $\pm 2^\circ\text{C}$ (-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 64GB 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

Opgal EyeCGas 2.0 Long Range

Specification	Description
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 Wifi
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
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)
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	3.0 kg (6.6 lb)
Mounting interfaces	UNC ¼"-20
Warranty	4 years (Detector & 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.

 Learn more at thermofisher.com/eyecgaslongrange

thermo scientific

For current certifications, visit thermofisher.com/certifications

© 2026 Thermo Fisher Scientific Inc. All rights reserved. EyeCGas™ is a registered trademark of Opgal Optronics Industries Ltd. Used with permission. RealWear™ is a registered trademark of RealWear, Inc. All other trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. **EPM-DS1669-EN 1/26**