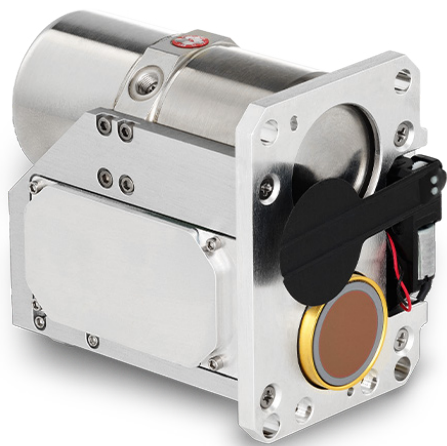


SWaP Optimized MWIR Optical Gas Imaging Camera Module

NEUTRINO® LC OGI



Made in the USA, the ITAR-free Neutrino LC OGI provides 640x512 VGA-resolution MWIR optical-gas-imaging (OGI) and is easily integrated into a wide range of solutions to detect, measure, and visualize gas emissions. Teledyne FLIR's High Operating Temperature (HOT) FPA technology and linear micro-cooler provide integrators with the industry-best, two-year warranty and significantly longer endurance in the leading size, weight, and power (SWaP) module available today. Quick cool down and time-to-image combined with low-power and quiet, low-vibration operation make Neutrino LC OGI the choice for battery-powered handhelds, UAVs (unmanned aerial vehicles), small gimbals, and fixed-mounted gas leak detection systems within processing facilities, refineries, pipelines, tank farms, and well pads for the oil and gas industry.

Designed to meet EPA performance requirements, the narrow 3.3 μm infrared (IR) spectral band accurately detects hydrocarbons including methane, propane, butane, and other greenhouse gases and volatile organic compounds (VOCs). The Neutrino LC OGI can be operated in VGA mode to maximize scene awareness or Bin mode to improve sensitivity to an industry-leading <20 mK. Backed by a standard two-year warranty and a professional technical support team for integration assistance, the Neutrino LC OGI is the lowest-risk and highest-performance OEM camera module for integrators developing methane monitoring and other gas imaging solutions today.



RAPID AND ACCURATE LEAK DETECTION

15 μm HOT MWIR FPA and image processing offer industry-best sensitivity and visualization.

- Detect methane, propane, butane, and other hydrocarbons
- 640 x 512 VGA array with 1x to 8x digital zoom
- <35 mK VGA mode and <20 mK Bin mode
- <5.5 min cooldown time at 23 °C



MAXIMIZE OPERATIONAL TIME

Best-in-class size, weight, power consumption, and reliability.

- <12W cool down and <5.25W steady state at 23 °C
- <380 grams (without lens) and compact size
- Quiet, low-vibration linear micro-cooler
- 27,000-hour MTTF with Industry leading two-year warranty



DESIGNED FOR INTEGRATORS

Reduce development and supply chain risk with the global manufacturing leader in IR.

- Built-in support for physical and protocol-level industry standards
- Full suite of hardware accessories and SDK
- Dedicated technical team for post-sales integration support
- ITAR free – classified under US Department of Commerce jurisdiction as EAR 6A003.b.4.a



For FLIR Sales and Service contact us at:

Phone: 1-888-919-2263 | Outside the U.S.: +1-845-343-4077 | Fax: +1-845-343-4299

Address: P.O. Box 4242 Middletown, New York 10941 USA

For more information visit:
www.OEMCameras.com/neutrinoOGI

www.teledyneflir.com

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01/25/2024 REV

SPECIFICATIONS

| Neutrino LC OGI | |
|--|--|
| Sensor Technology | HOT MWIR |
| Sensor Size | 640 x 512, 15 µm pitch |
| Spectral Band | 3.2 – 3.4 µm |
| Sensitivity (NEΔT) | <35 mK (50% well fill at TBB=25 °C) |
| Frame Rate Options | 60 Hz maximum, 30 Hz nominal |
| Time to Image | <5.5 min 23 °C ambient |
| Shutter | with Integral Shutter |
| PHYSICAL ATTRIBUTES | |
| Size (L x W x H) | 78.5 x 45.5 x 61 mm (3.1" x 1.8" x 2.4") |
| f/number | f/1.59 |
| Cold Aperture Height | 18.56 mm from FPA |
| Weight | <380 g (<13.4 oz) |
| FPA CONTROL | |
| ROIC | ISC0403 |
| Direct Injections, Snapshot, Progressive | Yes |
| Programmable Integration Time | Yes (.01 ms - 16 ms) |
| Well Capacity | 7 x 10 ⁶ electrons |
| ROIC Modes | Free Run, Readout Priority, & Integration Priority |
| External Sync | Master or Slave |
| IMAGE PROCESSING & DISPLAY CONTROLS | |
| NTSC/PAL | Yes (accessory board required) |
| Image Optimization/AGC | Linear, Histogram Equalization, DDE |
| Invert/Revert | Yes |
| Color Palettes/LUTs | Yes, RGB888 mode |
| Symbology | Yes, RGB888 mode |
| Continuous Zoom | Yes, up to 8x |
| DIGITAL VIDEO | |
| Parallel (24-bit/16-bit/8-bit) | Yes |
| Camera Link | Yes (accessory board required) |
| USB | Yes |
| INTERFACING | |
| Primary Electrical Connector | 80-pin Hirose, DF40C-80DS |
| Input Power | +3.3 VDC Camera, +12 VDC Cryocooler |
| Power Dissipation | <12W cooldown, <5.25W steady state @ 23 °C |
| Communication | USB or UART (921.6k baud) |
| Discrete I/O Control | One Discrete, custom configurable at factory |
| User Configurability via SDK & GUI | Yes |
| ENVIRONMENTAL | |
| Operating Temperature Range | -40 °C to +71 °C (-40 °F to +160 °F) |
| Non-Operating Temperature Range | -57 °C to +80 °C (-65 °F to +176 °F) |
| Operational Altitude | ~12 km (40,000 ft) |
| Humidity | Non-condensing between 5% – 95% |
| Vibration | 5.8 grms 3-axis, 1hr each |
| Shock | 40g w/ 11 ms half-sine pulse, 3-axis |

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com/neutrinoogi

Equipment described herein is subject to US export regulations and may require a license prior to export. Diversion contrary to US law is prohibited. Imagery for illustration purposes only. Specifications are subject to change without notice. ©2024 Teledyne FLIR LLC, Inc.

Approved for public release. Teledyne FLIR Approved [FLIRGTC-SBA-001]

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