



MFE
INSPECTION
SOLUTIONS



OGI 640

SPECIALIZED OPTICAL GAS IMAGING DRONE PAYLOAD

According to the Environmental Protection Agency, a typical refinery or chemical plant can emit 600-700 tons per year of VOCs from leaking equipment, such as valves, connectors, pumps, compressors, etc.

That's going to stop here..

The OGI 640 (Optical Gas Imaging) camera brings together the latest in detector, cooler and lens design for detecting and visualizing hydrocarbon gas leaks. The powerful low SWaP platform is built for integration into manned and unmanned aerial platforms for surveying large areas of infrastructure in a fast and effective manner.

OGI 640

DRONE PAYLOAD

WATCH VIDEO

VISIT WEBSITE

The OGI 640, a specialized Optical Gas Imaging camera, is the culmination of groundbreaking innovations in detector design, cooler efficiency, and lens technology. Housing a state-of-the-art 640x512 pixel pitch HOT MWIR detector array, it showcases unparalleled sensitivity in gas leak detection. This detector, combined with a purpose-built f/1.5 cold shield lens, ensures optimal thermal sensitivity, enabling operators to visualize and detect even minute hydrocarbon emissions.

- Turn Key, Drone Based
- Optical Gas Imaging Sensor
- PA NSPS OOOOA Certified
- Fully integrated with DJI Pilot Application
- View and Control OGI Camera Sensor with app
- No third-party application needed
- Compatible with the Matrice 300 RTK Series



A E R I A L D E T E C T I O N , G R O U N D E D P R E C I S I O N



OGI 640 & DJI Matrice 300 Series Compatibility

The OGI 640's compatibility with the DJI Matrice 300 series represents a formidable fusion of advanced technology, streamlining inspections in the oil and gas sector. This pairing takes full advantage of both the detection capabilities of the OGI 640 and the flight prowess of the DJI Matrice 300 Series.

Together, they offer a seamless integration that provides industry professionals with a robust, reliable, and efficient solution for optical gas imaging from the sky.

- **Seamless Integration:** The OGI 640 is specifically designed to work harmoniously with the DJI Matrice 300 series, ensuring smooth operations.
- **Enhanced Flight Time:** The DJI Matrice 300's extended flight time complements the OGI 640's functionality, allowing for prolonged inspection periods.
- **Precision Location:** The DJI Matrice 300's advanced positioning system ensures accurate location data, enhancing the OGI 640's ability to pinpoint gas leaks with precision.
- **Safety and Efficiency:** Using the OGI 640 with the DJI Matrice 300 reduces the need for on-ground inspections, minimizing risks and maximizing operational efficiency.
- **Cost-Effective Operations:** The combination reduces the frequency of contractor visits and other operational costs, making aerial inspections more economical.



20+ Detective Gasses



View & Control through DJI app



Compatible with the DJI Matrice 300 Series



542 Grams Low Swap Integration



OOOOA Certified



Hot MWIR 640 x 512 15 μ m Detector

OGI 640

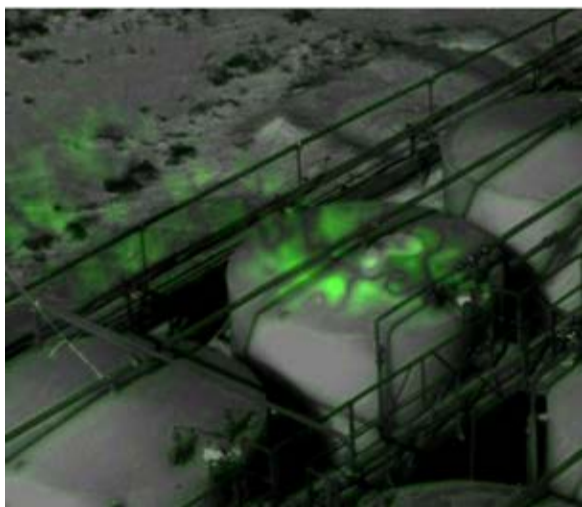


OGI 640: OPTICAL IMAGING REDEFINED

In the ever-evolving landscape of the oil and gas industry, the need for innovative and efficient solutions has never been more critical. Enter the OGI 640 – a pioneering optical gas imaging camera designed to meet the industry's unique challenges head-on. Merging cutting-edge technology with practical functionality, the OGI 640 promises to transform aerial inspections, redefining safety standards, and setting new benchmarks in cost-efficiency. Dive into its standout features and discover why it's heralded as the next big leap in optical gas imaging.

Advanced Gas Detection Capabilities

The OGI 640 stands out with its unmatched ability to detect a myriad of gases invisible to the human eye. Designed specifically for the oil and gas industry, it aids in promptly identifying and mitigating leaks, ensuring safety and reducing VOC emissions.



Fully integrated with DJI Pilot Application

Harness the synergy of the OGI 640 camera and the DJI Controller through the DJI Pilot Application. This combination provides a tailored interface for optical gas imaging, allowing for intuitive navigation and real-time data access, ensuring precise and efficient missions every time.



Cost-Effective and Safe Inspections

Shifting away from conventional inspection methods, the OGI 640 provides an efficient aerial solution. By reducing the need for ground operations and external contractors, it significantly cuts operational costs and minimizes exposure to potential hazards.



“BEFORE THE OGI 640, OGI CAMERAS WERE LARGE AND HEAVY. IT TOOK A LARGER DRONE, TYPICALLY THE SIZE OF A DJI M600 TO FLY THE CAMERA. THE SYSTEM HAD LOOSE WIRES WHICH WERE “SPAGHETTI STRAPPED”. THE OGI 640 IS A DIRECT FIT TO THE DJI M300 GIMBAL AND THE USER INTERFACE IS ON THE DJI CONTROLLER.”

JOHN MCCLAIN, HOUSTON AREA OIL COMPANY

OGI 640 SPECIFICATIONS

■ DETECTOR

Detector Type	High operating temp MWIR
Array Format	640 x 512
Pixel Pitch	15 Micron
Spectral Response	MWIR
Frame Rate	30 Hz
NETD	<50 mK

■ SYSTEM

Analog Video Output	NTSC/PAL
Digital Video Output	Uncorrected 14-bit CameraLink
Digital Zoom / Pan	2X, 4X, 8X
Camera control / Command Interfaces / System Control	Ethernet Serial (RS-422/RS-232)
Input Voltage	12VDC

■ ENVIRONMENTAL

Power Dissipation	6W Typical/ 2W Peak
Operating temperature	35°C to +65°C
Certifications	0000a Certified (<=60 g/hr)

■ OPTICS & WEIGHT

Weight	542 Grams
Lens	25 mm Lens
F#	1.5
FOV or H/FOV	21.7°
Focus	Thread focus

■ DETECTABLE GASSES

Acetic Acid, Ammonia, Benzene, Butadiene, Butane, Ethane, Ethylbenzene, Ethylene, Heptane, Hexane, Isoprene, Methyl Ethyl Ketone (MEK), Methane, Methanol, MIBK, Octane, 1-Pentane, Propane, Propylene, Sulphur Dioxide, Toluene, Vinyl Chloride and Xylene.



“MFE DOES NOT JUST SELL YOU A PRODUCT. THEY HAVE TRAINING AND SUPPORT AFTER THE SELL. ALSO, THEY HAVE HIGH LEVEL CONTACTS WITH THE MANUFACTURERS FOR THE PRODUCTS THEY SELL. IF THEY CANNOT FIX AN ISSUE AT THEIR OFFICE, THEY HANDLE THE REPAIR WITH THE MANUFACTURE.”

**JOHN MCCLAIN,
HOUSTON AREA OIL COMPANY**

USING OGI 640 SENSOR



OTHER OGI CAMERAS

