SIERRA-OLYMPIA
TECHNOLOGIES INC.

VIENTO LWIR OGI

HIGH PERFORMANCE IN A LOW-SWAP PACKAGE

The Viento LWIR OGI is a cost-effective compliment to the Ventus (MWIR) OGI. It is optimized to detect leaks with higher emission volume and concentration.

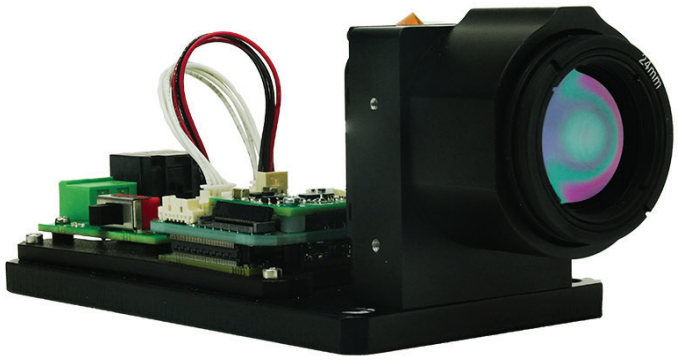
DETAILS

Viento LWIR OGI excels in applications where continuous monitoring is needed to locate large intermittent gas leaks. Various packaging and interface options allow for versatile integration with drones, robotics, handhelds and more, and is available in both 'core' and 'developer kit' (with an ethernet video encoder) configurations for ease of integration.

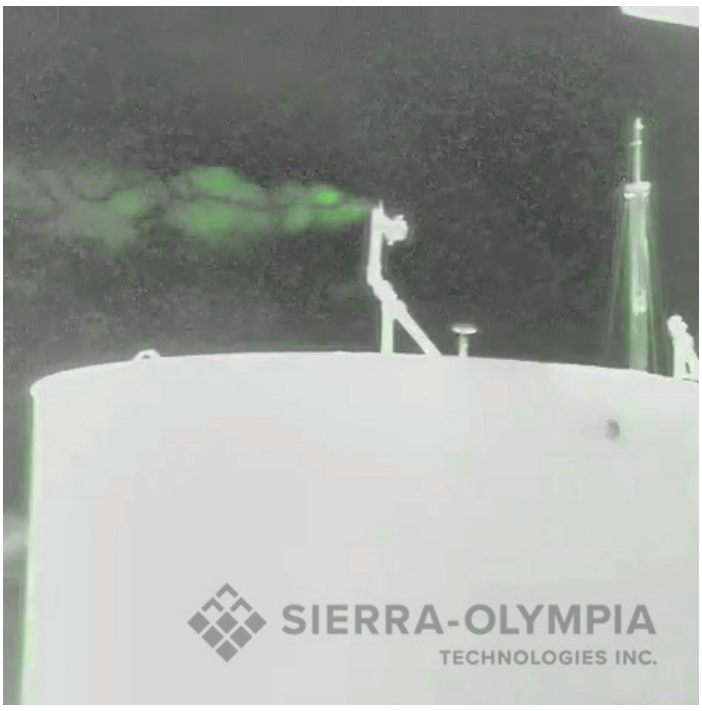
APPLICATIONS

+ Optical Gas Imaging
+ Continuous Monitoring
+ Low-SWaP

+ 17 µm Pixel Pitch Microbolometer
+ High-performance, Cost-effective LWIR Infrared Camera Core
+ Analog or Digital Video Outputs
+ GEM (Gas Enhancement Mode)
+ Integrated Shutter for Flat Field Correction
+ Compact, Light, Durable, Versatile



Viento LWIR OGI Development Kit



SIERRA-OLYMPIA
TECHNOLOGIES INC.

VIENTO LWIR OGI

AROUND THE CLOCK RELIABILITY

FEATURE SPECS

DETECTOR

	Core 24mm & 55mm
Detector Type	Uncooled VOx Microbolometer
Array Format	640 x 480
Pixel Pitch	17 Micron
Spectral Response	LWIR w/Gas Dependent Filter
Frame Rate	30Hz or 9Hz
Bit Depth	14-Bit
NETD	<50mK w/out gas optical filter or temporal software filter

LENS

	24mm	24mm Dev. Kit	55mm	55mm Dev. Kit
F#	1.0	1.0	1.0	1.0
HFOV x VFOV	25.5° x 19.2 °	25.5 ° x 19.2 °	11.3 ° x 8.5 °	11.3 ° x 8.5 °
Focus	Fixed	Fixed	Fixed	Fixed
Front Element Coating	High Durability	High Durability	High Durability	High Durability

SYSTEM

	24mm & 55mm	24mm & 55mm Dev. Kit
Analog Video Output	NTSC (480i); PAL (576i) field switchable	
Digital Video Output	14-bit/8-bit LVCMOS or Camera Link®	H.264/H.265 encoded ethernet. Other accessory outputs may be available
User 2-pt NUC	No	Yes, via encoder
User 1-pt NUC	Internal Shutter and external	Internal shutter and external
Image Enhancement	Image Contrast Enhancement	Gas Enhancement, Linear Histogram AGC, CLAHE, LAP, Sharpen, De-noise, Electronic Image Stabilization
Color Palette Options	Yes	Yes
Digital Zoom	1X to 4X	1X to 4X
Digital Pan	Yes	Yes
Onboard Storage	No	Micro SD
Camera control/Command Interfaces/System Control	Serial (LVTTL)	Serial (LVTTL)
Other Electrical Interfaces	Genlock	Auxiliary UART, GPIO, Power

ENVIRONMENTAL

	24mm	24mm Dev. Kit	55mm	55mm Dev. Kit
Size (L x W x H)	45mm x 40mm x 51mm	140mm x 64mm x 57mm	75mm x 65.5mm x 65.5mm	180mm x 65.5mm x 69mm
Weight	144g	320g	246g	422g
Input Voltage	4.75 - 5.5V (5V nom), with feature board: 4.8 - 18V (12V nom).	8-15V DC (12V nom)	4.75 - 5.5V (5V nom), with feature board: 4.8 - 18V (12V nom).	8-15V DC (12V nom)
Power Dissipation	1.1W	6.1W	1.1W	6.1W
Operating Temperature	-40ºC to +80ºC	-35ºC to +55ºC	-40ºC to +80ºC	-35ºC to +55ºC