




# NUCLEUS OGICamera Core







The **NUCLEUS** OGI Camera Core is a highly sensitive solution designed specifically for leak detection of greenhouse gas emissions, including methane and VOCs. Built with our proprietary advanced HOT T2SL MWIR and T2SL LWIR detector technology, this core offers superior performance in identifying even the smallest leaks. We provide two detector options, including the QVGA 320x256 30µm array for enhanced detection sensitivity or the VGA 640x512 15µm array for superior pixel resolution, ensuring you get the clarity and accuracy needed for critical applications.

To get started, simply refer to the reverse page for a selection of cooled detectors, then choose the module configuration, electronic boards, and lenses that best suit your requirements. Once all components are selected, we will deliver a fully integrated camera core - complete with firmware and software - for seamless integration and quick deployment into handheld devices, aerial platforms, or fixed-mounted systems.

## Detector and AD Module and Video Engine

Detector Integration Options		
Detector	Detector + AD Module	Detector + AD Module + Video Engine
		

## Electronic Boards for Cooled Detector

Selection Table for the Boards					
Proxy Board		Video Board	Power Board		Power Board
KT-XB-A	KT-XB-B	KT-XB-C	KT-VB-U	KT-XB-C	KT-PB
					

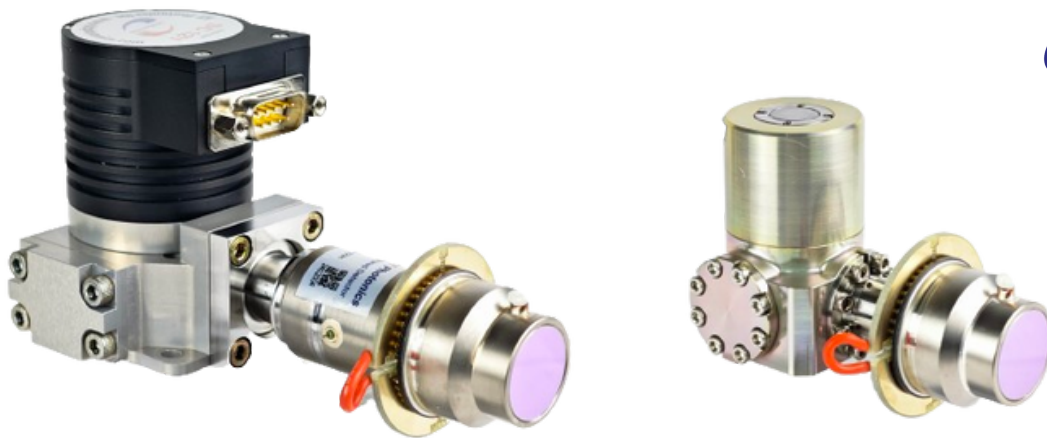
## Lens for Cooled Detector

	Infrared Camera			
				
<b>Focal length</b>	35mm	18mm	22.5mm	50mm
<b>Aperture (F#)</b>	1.2	1.2	1.2	2
<b>Field of view</b>	15.6°	30°	24°	11°

\*Other lens sizes upon request

\*Specifications are subject to change without prior notice

KT-OGI-202503- V1 -P



## Long-life OGI Infrared Detector

### Standard Version & Miniature (SWaP)

- HOT MWIR T2SL Technology
- Double Lifetime (2 X ROI)
- SWaP (Size, Weight, and Power)
- Exception Image Quality
- High Sensitivity and Performance

	Specifications			
	Standard		Miniature (SWaP)	
Model	KT3M-330H	KT6M-330H	KT3Mm-330H	KT6Mm-330H
Resolution	320x256	640x512	320x256	640x512
Pixel Pitch	30μm	15 μm	30μm	15 μm
Spectral Response	3.2~3.5 μm Hydrocarbons, VOC (+Methane)			
Steady Power Consumption	<6w	<8w	≤4w	≤5w
Detector Type	HOT MWIR T2SL			
NETD	≤15mk	≤20mk	≤15mk	≤20mk
Operability	>99%			
Cooling Method	Sterling Cooler			
Power Supply	12VDC/24VDC			
Cool Down Time	<5 min			
Weight	<550g		<260g	
Frame Rate	50Hz			
F Number	F/1.2 (with 3.3μm Cold Filter), other F# also available			
Dimension (mm)	137x57X71mm		76x39x57.5mm	

### Other Gas Types

Narrow Bandpass Filter	Typical Detectable Gas Types
3.3μm	Methane, Butane, Octane, Xylene, Benzene, Propylene and other VOCs gases
4.3μm	Carbon Dioxide (CO <sub>2</sub> ) and other gases
4.6μm	Carbon Monoxide (CO) and other gases
6.1μm	Nitrogen Oxides (NO <sub>x</sub> ) and other gases
8.3μm	Halothane, Refrigerants and other gases
10.55μm	Sulfur Hexafluoride (SF <sub>6</sub> ), Ammonia (NH <sub>3</sub> ), Bromomethane and other gases