

MANTIS

Multispectral Thermal Imaging Camera

**NEW
PRODUCT**



Multispectral IR Camera

- Capture multiple modalities in one camera
- Optical design leverages exclusive chalcogenide materials
- Broad coverage range in MWIR & LWIR (2um – 12um)
- Low size, weight and power
- Uncooled detector, 640 x 480 pixel array
- Target applications include use with drones, thermal imaging, laser beacon recognition and fire detection
- Customized cores and lens assemblies are available



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Nominal Design Summary

Parameter	Notes	Design	Unit
Waveband	Multispectral (MWIR –LWIR)	2 –12	μm
Lens EFL	Magnification-based	19	mm
Lens F/#	Aperture-based	f/1.1	
Detector Resolution	Horizontal x Vertical / Pitch	640x480 / 17μm	pixels
Field of View	Vertical FOV	24.3	deg
	Horizontal FOV	32.0	deg
	Diagonal FOV	39.3	deg
Lens MTF – Avg Sag/Tan at Nyquist (29.4 lp/mm) (2-12μm waveband)	<i>Diffraction Limited MTF (Ref. Only)</i>	68	%
	MTF at On-Axis Field	65	%
	MTF at VFOV	49	%
	MTF at HFOV	42	%
	MTF at DFOV	50	%
Lens Distortion	Max over Full Field (corner)	2	%
Relative Illumination	At HFOV	83	%
	At Corner Field	77	%
Size	Camera (length x height x width)	~49 x 52 x 64	mm
	Lens (diameter x length)	~25 x 25	mm
Weight		< 200	g
Power Consumption		1.1	W

