OPHIR® KAMU MWIR SXGA INFRARED CAMERA SERIES

FULL PLUG AND PLAY INTEGRATION FOR IMMEDIATE PLATFORM ONBOARDING

FULLY INTEGRATED INFRARED CAMERA SOLUTION FOR IMMEDIATE PLATFORM ONBOARDING
BUILT ON A LEGACY OF OPTICAL LEADERSHIP

A Plug-and-Play Approach to MWIR Imaging

The Ophir® Kamu MWIR SGXA camera architecture provide standardized interfaces and well-defined control schemes reduce system complexity and minimize integration risk. This approach enables faster transition from lab validation to field deployment, supporting accelerated program schedules without compromising technical rigor.

Mission Grade MWIR Long-Range Imaging Capability

The Kamu series combines best-in-class MWIR f/4 continuous-zoom with a high-resolution SXGA 10 µm detector, advanced video-processing, and an integration-ready architecture to accelerate deployment while delivering long-range, high-performance imaging.

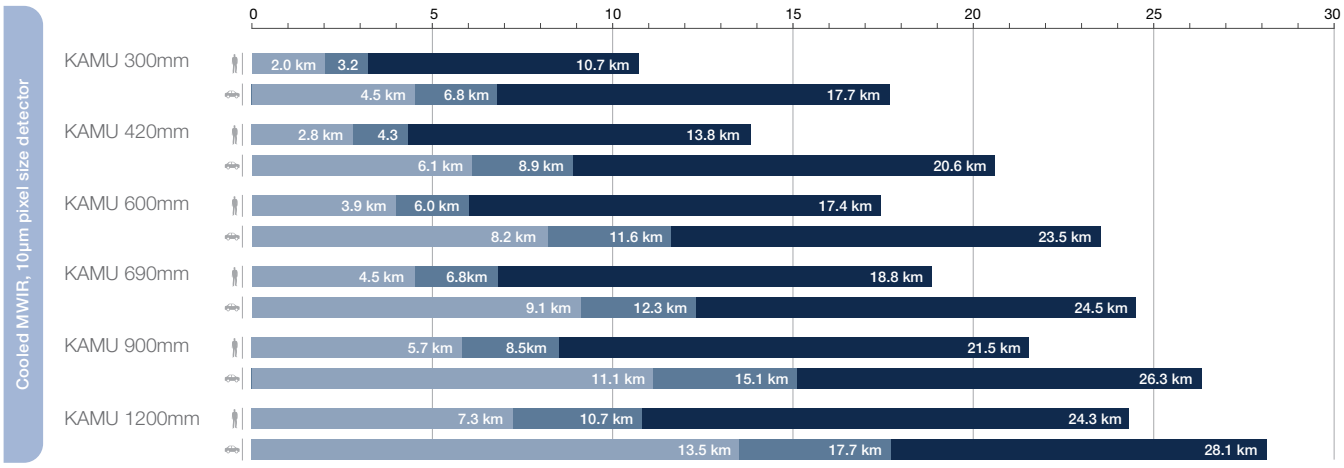
The system delivers unmatched clarity, low distortion, stable line-of-sight (LOS), precise boresight and image focus, across the zoom range.

The KAMU series spans focal lengths from 300 mm to 1200 mm, supporting extended detection and long-range imaging performance for perimeter security, observation and surveillance, and counter-UAS missions.

Key Product Capabilities

- SXGA MWIR cooled sensor (1280×1024, 10 µm)
- Constant f/4 aperture from 0.6° (NFOV) to 47.8° (WFOV)
- Digital video outputs & streaming: H.264/H.265, HD-SDI, HDMI
- Advanced NUC & calibration: 2-point NUC, optional 1 point
- Open-frame and MIL-STD-810 qualified configurations available

Target Identification and Detection Ranges (Km)



Identification
Recognition
Detection

Vehicle size 2.3m x 2.3m

Human size 1.7m X 0.5m

NOTE: Calculations are based on the "Johnson Criteria" | Real world performance may vary depending on weather conditions.
Assumptions: 23mK NETD | 30Hz frame rate | 50% detection probability

The Ophir® Kamu Thermal Camera Series MWIR f/4 SXGA 10 µm

Property	Value											
Detector												
Detector Type	Cooled FPA											
Spectral Range	3.6-4.9µm											
Resolution	1280x1024											
Pixel Pitch	10 µm											
Cooling Method	Rotary / Striling											
Optics												
Optical Aperture	f/4											
Optics Type	Continuous zoom											
Zoom Capability	Optical zoom											
HFOV Range	**300mm**		**420mm**		**600mm**		**690mm**		**900mm**		**1200mm**	
	W	N	W	N	W	N	W	N	W	N	W	N
	45.0°	2.4°	20.0°	1.7°	11.4°	1.2°	11.5°	1.0°	9.3°	0.8°	6.8°	0.6°
Video												
Video Outputs	HDMI, HD-SDI											
Video Streaming	H.264/265											
Control Interfaces	RS422, Ethernet											
Digital Zoom	Yes											
Calibration / NUC	BPR 1pt NUC, 2pt NUC											
Environmental												
Environmental Sealing	Optional											
Operation Temperature	-32ºC to +71ºC											
Storage Temperature	-40ºC to +71ºC											
Vibration	MIL-STD-810 C											
Shock	MIL-STD-810 C											
Mechanical												
Housing	OEM						Closed					
Weight*	9.3kg						18.6kg					
Dimentions*	432mm length, Diameter: 286mm						610mm length, Diameter: 335mm					

* Applicable for 900mm camera

About Ophir an MKS Inc. Brand

With five decades worth of knowledge and experience, MKS's Ophir Infrared Optics product line is a world leading designer and manufacturer of high-performance IR thermal imaging systems and optics for SWIR, MWIR & LWIR imaging. Using advanced technologies and innovative engineering we provide a global solution for homeland security, surveillance, defense and commercial applications: infrared thermal imaging cameras, complex lens assemblies and components.

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