

NUCLEUS Thermal Camera Core

The **NUCLEUS** Thermal Camera Core offers exceptional sensitivity for a wide range of thermal imaging applications. Featuring our proprietary HOT T2SL MWIR and T2SL LWIR detector technology, this core delivers impressive performance across various configurations. We include multiple options to choose from: the QVGA 320x256 30µm detector for enhanced sensitivity, the VGA 640x512 15µm detector for superior pixel resolution, and the HD 1280x1024 detector for ultra-high-definition image clarity.

What sets the NUCLEUS Thermal Camera Core apart is its configuration flexibility. 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



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	КТ-РВ			

T2SL(SLS)Cooled Infrared Detectors









Standard

Small

Mini (SWaP)

Model	Toma	Ou a stud Band	Variation	Develotion	Divisi Divis	NETD
Model	Туре	Spectral Band	Version	Resolution	Pixel Pitch	NETD
КТЗМ	HOT MWIR	3-5um	Standard	320x256	30um	≤15mk
KT3Ms	HOT MWIR	3-5um	Small	320x256	30um	≤15mk
KT3Mm	HOT MWIR	3-5um	Mini (SWaP)	320x256	30um	≤15mk
КТ6М	HOT MWIR	3-5um	Standard	640x512	15um	≤20mk
KT6Ms	HOT MWIR	3-5um	Small	640x512	15um	≤20mk
KT6Mm	HOT MWIR	3-5um	Mini (SWaP)	640x512	15um	≤20mk
KT1210M	HOT MWIR	3-5um	Standard	1280x1024	10um	≤25mk
KT1212M	HOT MWIR	3-5um	Standard	1280x1024	12um	≤25mk
KT3L	T2SL LWIR	7.5-9.5um	Standard	320x256	30um	≤25mk
KT3Ls	T2SL LWIR	7.5-9.5um	Small	320x256	30um	≤25mk
KT6L	T2SL LWIR	7.5-9.5um	Standard	640x512	15um	≤25mk
KT6Ls	T2SL LWIR	7.5-9.5um	Small	640x512	15um	≤25mk
KT625L	T2SL LWIR	7.5-9.5um	Standard	640x512	25um	≤25mk
KT3L-1055	T2SL LWIR	10.3-10.7um	Standard	320x256	30um	≤25mk
KT6L-1055	T2SL LWIR	10.3-10.7um	Standard	640x512	15um	≤25mk

Lens for Cooled Detector

	Infrared Camera					
		03				
Focal length	35mm	18mm	22.5mm	50mm		
Aperture (F#)	1.2	1.2	1.2	2		
Field of view	15.6°	30°	24°	11°		

^{*}Other lens sizes upon request