

Required Specifications for Cooled MWIR Detector

Item	Required Specifications
Camera	Complete Cooled MWIR Camera system including Software(s) for H/W control and Data acquisition
Detector Type	MCT(HgCdTe)
Detector size (Pixel number)	640x512
Spectral range	1.5-5.1 μ m
Pixel pitch(size)	15 μ m
NEDT	Less than 20mK
Quantum Efficiency (Peak)	Higher than 90% or Higher than 80%@2-4 μ m
Pixel Operability	Higher than 99%
Non-uniformity	Less than 5%
Readout Noise (RMS)	Less than 500e-
Well capacity	Higher than 6.0Me-
Minimum Integration time	Shorter than 0.1ms
Maximum Integration time	Longer than 20ms
Dynamic range	14 or 16bit
Cooler Type	K508 stirling cooler or equivalent (cooling temperature, cooling capacity, vibration, life time) cooling system
Output	Analog & Digital
Digital output	GigE or/and Camera Link
Lens mount	Bayonet
Shock	Compliant to MIL-STD-810G or equivalent standards
Vibration	Compliant to MIL-STD-810G or equivalent standards
Operation temperature	Less than -20°C and Higher than 40°C
Major functions of Software	<ul style="list-style-type: none"> - Basic data acquisition and display - Basic commands & control functions for detector and cooling device - Adjustment of Integration time and Gain control - Export data format - Data transfer into ASCII (csv) format
Acquired data frame	Raw, Dark, Bias frames
Data format	Data conversion function to make uncompressed ASCII Detailed data format document
Non-Uniformity/Bad pixel	Included Non-uniformity/Bad pixel information
DAQ interface (if required)	Included in total price
Power supply	Included in total price
User Manual	Included
Lens/filter	N/A (No optics)
Warranty period	over 1year
Technical Support without charge	over 1year
Delivery schedule	within 6 months after the order (until Jan. 2015)