



SWIR1303KMB-5G

FPA1280P15L-17-T2a:with 2-Stage Thermoelectric Cooler

FEATURES

- 1280 x 1024 pixel resolution
- 0.9 μ m-1.7 μ m Spectral Range
- CLPT InGaAs image sensor
- Up to 100fps @ full resolution
- Global shutter
- 5G Ethernet interface
- ROI in x- and y-direction increases frame rate
- Snapshot ITR/IWR Modes
- Exposure Time can be adjusted

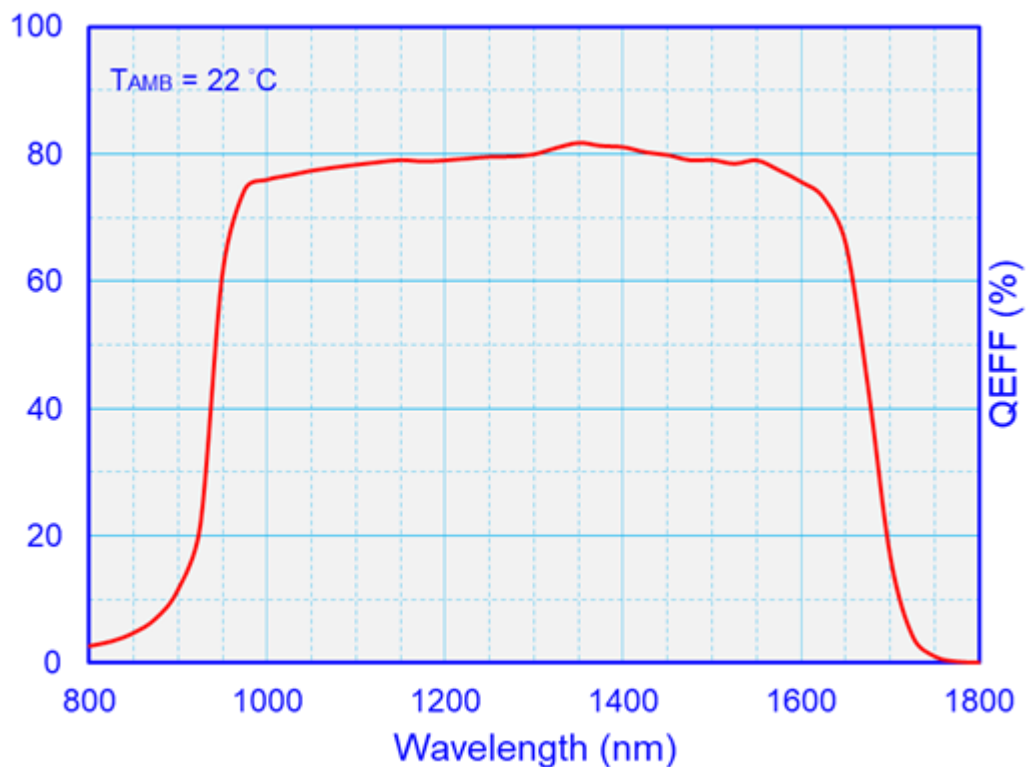
APPLICATIONS

- Near-Infrared Imaging
- Covert Surveillance
- Semiconductor/Solar Panel Inspection
- Medical Science and Biology
- Fiberoptic Telecommunication
- See through Fog / Smoke
- Ice / Slush / Moisture Mapping
- Industrial Thermal Imaging
- Astronomy and Scientific





Quantum Efficiency Image Sensor



Camera Specification

Sensor Model	1280P15L-17-T2a
Sensor Type	InGaAs CMOS sensor
Spectral Range	0.9um-1.7um
Pixel Size	15um
Sensor Size	1.5"
Backfocus Length	17.8±0.2mm
Diagonal	24.58mm
ADC	14-bit
Frame Rate& Resolution	100fps@1280x1024
Image Buffer	1024MB
QE	>70%
Conversion Gain	130.258e-/ADU(LG) , 6.085e-/ADU(MG) , 1.459e-/ADU(HG)
Dynamic Range	71.5dB(LG) , 65.7dB(MG) , 54.4dB(HG)
Readout Noise	562.92e-(LG) , 51.63e-(MG) , 45.63e-(HG)
Full Well	2.13Me-(LG) , 99.546Ke-(MG) , 23.845Ke-(HG)
SNRmax	130.258dB(LG) , 50.0dB(MG) , 43.8dB(HG)



SWIR CAMERA

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DATASHEET VERS. 1.0(Preliminary) July. 2025

Dark Current	<30fA @0.5V 20°C(This parameter is for reference only, please refer to the actual situation)
Exposure Time	26us-5s
Shutter Type	Global Shutter
Data Interface	5GigE
Digital IO	One optical-coupling isolated input, one optical-coupling isolated output, 2 non isolated input/output
Data Format	Mono 8 / Mono 14
Cooling Performance	$\Delta t=50^{\circ}\text{C}$
Dark Correction	Supported
Bad Pixel Correction	Supported
Flat Field Correction	Supported
ROI	Supported



General Specification

Power Supply	DC12V
Power Consumption	TBD
Temperature	Working Temperature -30~60°C. Storage Temperature-40~85°C
Humidity	20%-80%, no condensation
Camera Size	70*70*99.6mm (including height of trigger port adn M42 port)
Camera Weight	0.54KG
Mount Type	M42 Mount
Software	SDK /ToupView



Dimensions

