

Cooled SWIR Line Scan Camera



KEY FEATURES

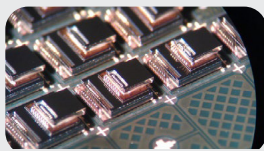
This infrared camera features a global shutter InGaAs sensor with up to 40kHz line rate, offering high sensitivity and low noise. It supports 0.1μs minimum exposure time, flexible trigger modes, flat field correction, LUT, temperature monitoring, and TEC. Ideal for photovoltaic inspection, bio-imaging, and other infrared applications.

- Global Shutter InGaAs Sensor
- Maximum Line Rate: 40 kHz
- Minimum Exposure Time: 0.1 μs, with 0.1 μs step size
- Flexible Exposure Modes: External Trigger, Free-Run ±2° C

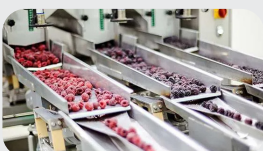
TYPICAL APPLICATIONS



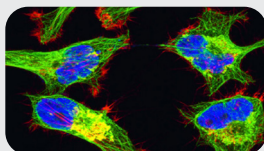
Photovoltaic Micro-Crack Inspection



PCB Inspection



Fruit, Vegetable, and Food Inspection



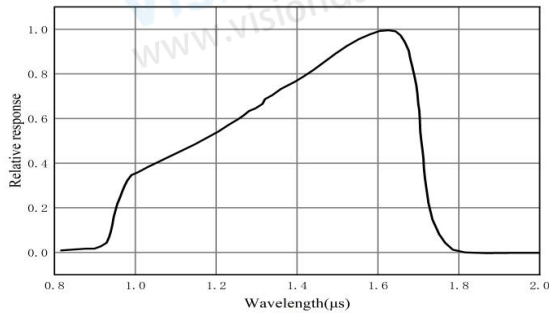
Bio-Imaging

► BASIC PARAMETERS

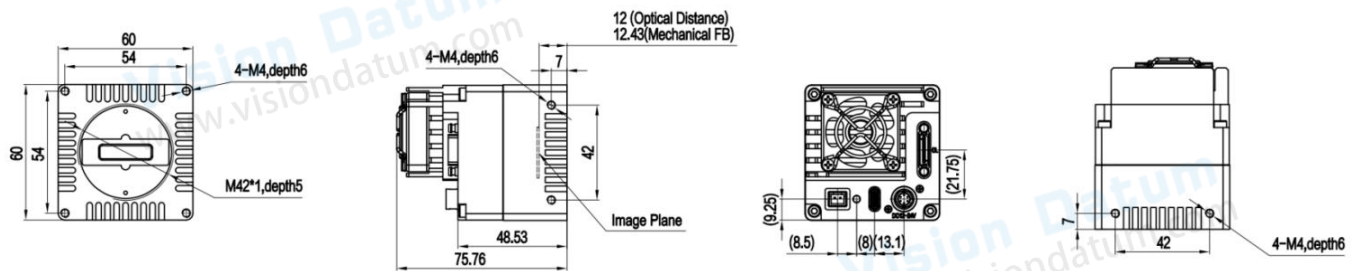
Model	iBoost40CSW1KM	iBoost40GSW2KM
Resolution	1024 x 1	2048 x 1
Sensor Technology	InGaAs	
Spectral Range	950–1700 nm	
Image Mode	Mono	
Optical Format	12.8 mm	
Pixel Size	12.5μm x 12.5μm	
Line Rate	40 kHz	
Data Format	8/10/12/14 bit	8/10/10p/12/12p/14 bit
Dynamic Range	≥ 65.2dB	≥ 65dB
Data Rate	71 MB/s	124MB/s
Trigger Modes	Internal Free-Run / External Trigger Control	Internal Free-Run / Line Trigger Control / Frame Trigger Control
Exposure Control	Timed Setting / External Pulse Width Control	
Exposure Time	0.1 μs — 19982 μs (step size: 0.1 μs)	0.1 μs — 19987 μs (step size: 0.1 μs)
Gain Range	1/5/25/50x (Analog Gain) 0.01x–8.00x (Digital Gain)	
Lens Mount	M42	M42 x 1
Data Interface	CameraLink	GigE Vision
Power Interface	Hirose HR10A–7R–6PB(Male)	HD15(Female)
Power	DC12–24V(±10%) 1.5A	
Power Consumption	10.2W (TEC On) 6.0W (TEC Off)	11.9W (TEC On) 7.0W (TEC Off)
Cooling Method	Thermoelectric Cooling (17° C below ambient) / Fan Cooling	Thermoelectric Cooling (12° C below ambient) / Fan Cooling
Dimension	60.0mm(W) x 60.0mm(H) x 75.76mm(D)	60.0mm(W) x 60.0mm(H) x 82.8mm(D)
Operating Temperature	0–55°C (Working) & –20–75°C (Storage)	

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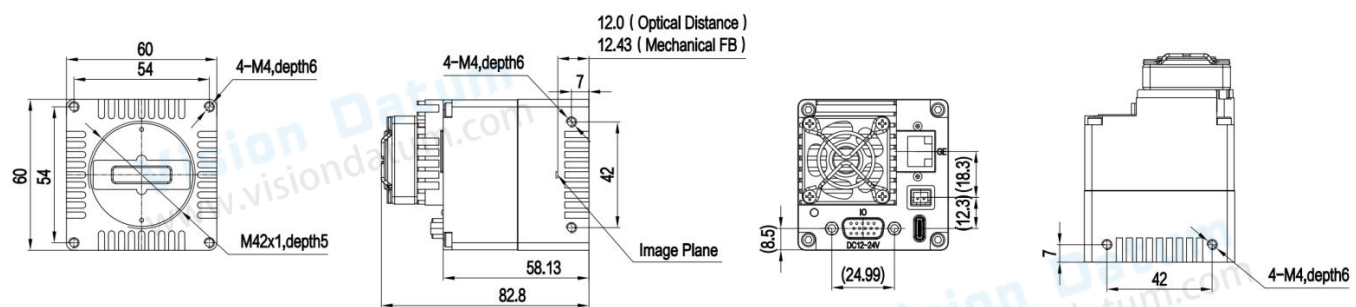
► Camera Spectral Response Curve



► Dimensions



iBoost40CSW1KM



iBoost40CSW2KM

FOR MORE INFORMATION CONTACT



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