

iBoost X SWIR Camera (IMX992)



Key Features

This high-performance industrial camera features a 1/1.4" InGaAs sensor with a 400-1700nm spectral range (optional 1030-1800nm filter), delivering 165fps@2560x2048 high-speed imaging. Equipped with a global shutter, 12-bit dynamic range, and -20° C~60° C operational stability.

TYPICAL APPLICATIONS



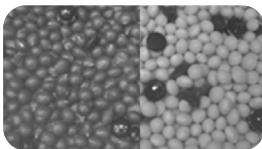
Fruit Spoilage
Detection



Fog Penetration



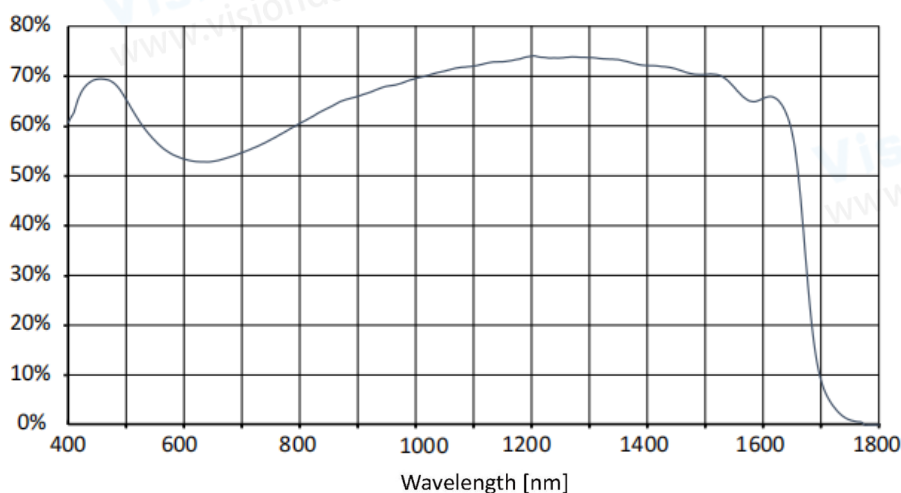
Inspection of Contents
In Packaging



Sorting Materials

- Spectral Range: 400-1700nm
- Up to 165fps@2560x2048 (8-bit) and 12-bit high dynamic range
- USB 3.0、GigE、Camera Link interface
- This camera employs Active Thermoelectric Cooling (TEC) technology to stabilize the sensor temperature at 25° C below ambient

► Spectral Response Curve



IMX992 Absolute Quantum Efficiency Curve

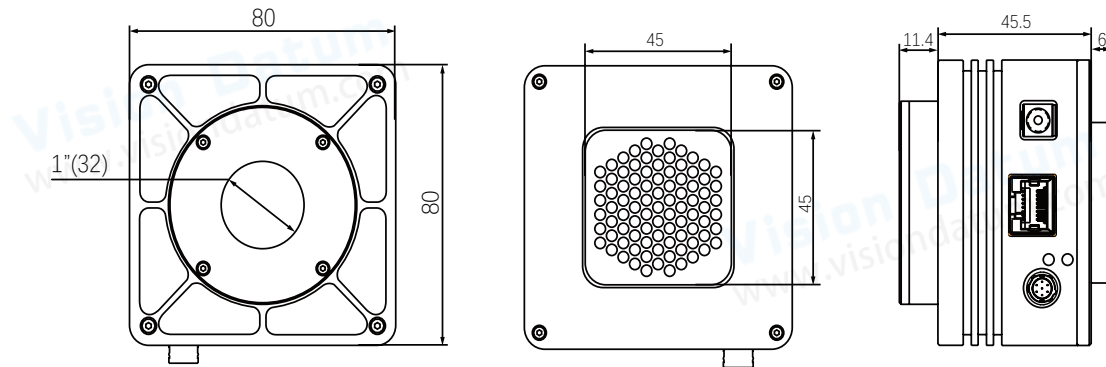
iBoost X SWIR Camera (IMX992)

Model	iBX-SWTG992A						iBX-SWU992A				iBX-SWC992A			
Sensor	Sony IMX992-AABA-C													
Sensor Technology	InGaAs													
Spectral Range	400nm-1700nm													
Pixel Size	3.45 μm x 3.45 μm													
Sensor Size	1/1.4"													
Resolution	2560x2048			1280x1024			2560x2048		1280x1024		2560x2048		1280x1024	
ADC Bit	8	10	12	8	10	12	8	12	8	12	10	12	10	12
FPS	145	145	82.7	278	278	158.6	61.9	35.5	135.7	135.7	100	61	322	187
Interface	10 GigE						USB 3.0				Camera Link			
Cooling	25° C below ambient temperature													
Binning	2x2, 3x3, 4x4										/			
Size	80*80*45.5mm (<390g) (Dimensions A)						80*80*45.5mm (<390g) (Dimensions B)				75*75*81.9mm (<390g) (Dimensions F)			
Hardware Image Cache	512MByte													
Conversion Gain	10.3e/ADU (HCG) 17.29e/ADU (LCG)													
Dynamic Range	51.36dB (HCG) 51.47dB (LCG)													
Read Noise	111.88e (HCG) 186.61e (LCG)													
Full Well Capacity	41.39ke (HCG) 69.92ke (LCG)													
SNR	46.17dB (HCG) 48.45dB (LCG)													
Gain Range	1x-15x													
Exposure Time	15μs-60sec													
Shutter	Global													
Digital I/O	1 opto-isolated input, 1 opto-isolated output, 2 non-isolated input and output													
Optical Filter	400-1800nm (default); 1030-1800nm (optional)													
CRA	2.35°													
Power Supply	DC 12 V						Power with USB 3.0 / DC 12 V				DC 12 V			
Power Consumption	<2.1W (Without Cooling) / <25W (Cooling)										TBD			
Temperature	-40~85 ° C (Storage), -20~60° C (Working)													
Humidity	20%~80% RH, non-condensing													
Lens Mount	C-Mount													
Software	Full SDK Package / iBoostX													

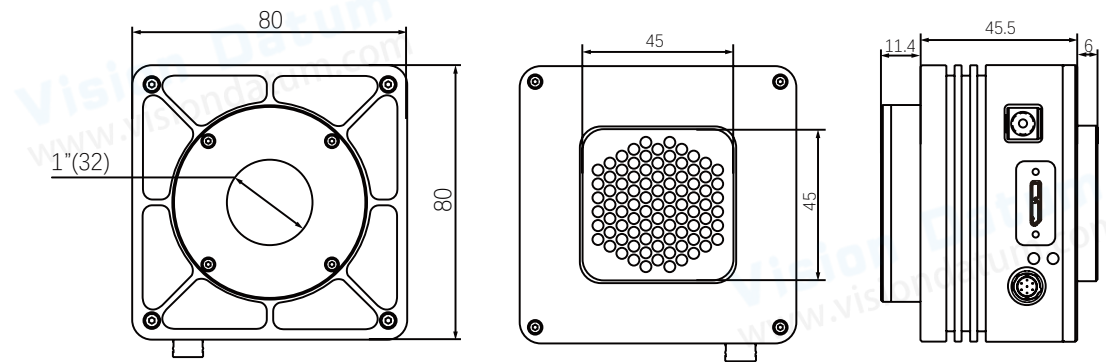
iBoost X SWIR Camera (IMX992)

Model	iBX-SWTG992J						iBX-SWU992J				iBX-SWX992J						iBX-SWG992J-Lite				iBX-SWU992J-Lite					
Sensor	Sony IMX992-AABJ-C																									
Sensor Technology	InGaAs																									
Spectral Range	400nm-1700nm																									
Pixel Size	3.45 μm x 3.45 μm																									
Sensor Size	1/1.4"																									
Resolution	2560x2048			1280x1024			2560x2048		1280x1024		2560x2048			1280x1024			2560x2048		1280x1024		2560x2048		1280x1024			
ADC Bit	8	10	12	8	10	12	8	12	8	12	8	10	12	8	10	12	8	12	8	12	8	12	8	12	8	12
FPS	145	145	82.7	278	278	158.6	61.9	35.5	135.7	135.7	131	120	70	252	231	135	22	11	90	45	61.9	35.5	135.7	135.7		
Interface	10 GigE						USB 3.0				CoaXPress				GigE				USB 3.0							
Cooling	10° C below ambient temperature						10° C below ambient temperature				25° C below ambient temperature				/				/							
Binning	2x2, 3x3, 4x4																									
Size	80*80*45.5mm (<390g) (Dimensions A)						80*80*45.5mm (<390g) (Dimensions B)				80*80*45.5mm (<390g) (Dimensions C)				33*33*58mm (Dimensions D)				33*33*38mm (<70g) (Dimensions E)							
Hardware Image Cache	2048MByte						512MByte																			
Conversion Gain	10.3e/ADU (HCG) 17.29e/ADU (LCG)																									
Dynamic Range	51.36dB (HCG) 51.47dB (LCG)																									
Read Noise	111.88e (HCG) 186.61e (LCG)																									
Full Well Capacity	41.39ke (HCG) 69.92ke (LCG)																									
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Optical Filter	400-1800nm (default); 1030-1800nm (optional)																									
CRA	2.35°																									
Power Supply	DC 12 V						Power with USB 3.0 / DC 12 V				Power with CoaXPress / DC 12 V				DC 12 V				Power with USB 3.0							
Power Consumption	<2.1W (Without Cooling) / <25W (Cooling)																									
Temperature	-40~85 ° C (Storage), -20~60° C (Working)																									
Humidity	20%~80% RH, non-condensing																									
Lens Mount	C-Mount																									
Software	Full SDK Package / iBoostX																									

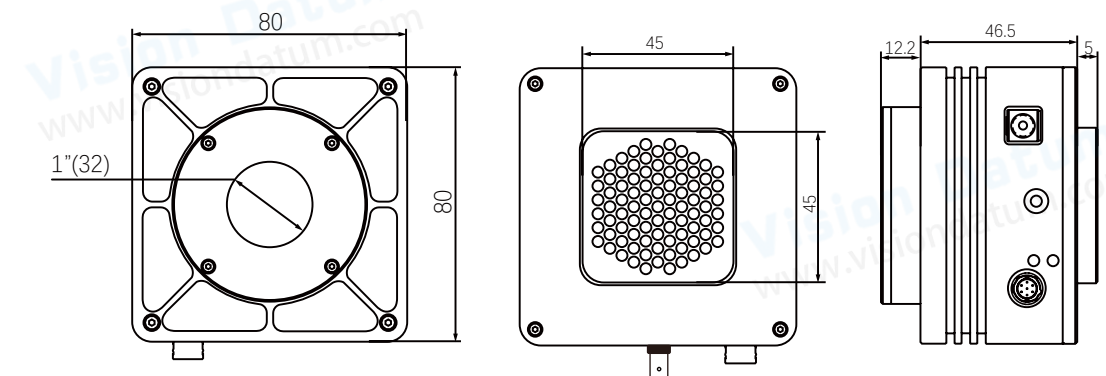
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Dimensions A

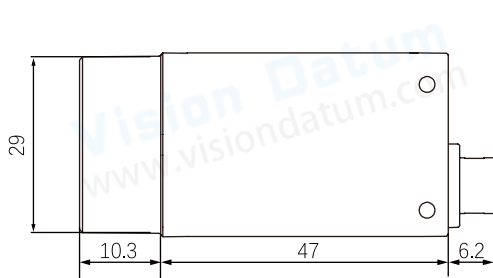


Dimensions B

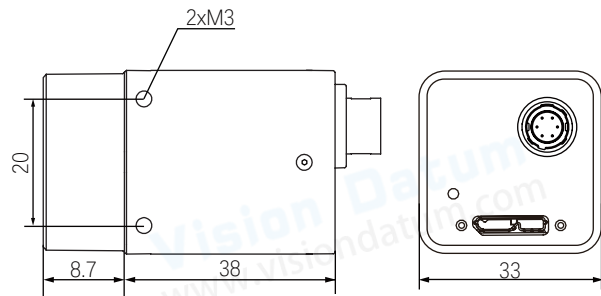


Dimensions C

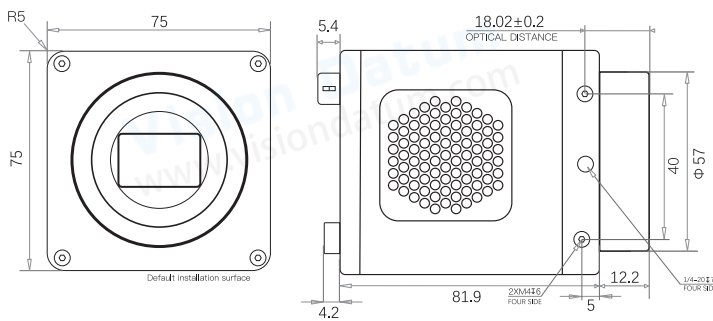
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Dimensions D



Dimensions E



Dimensions F

FOR MORE INFORMATION CONTACT



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