Amazon Series



IMI's Amazon Family of cameras is compliant with both Gigabit Ethernet and with the GigE Vision standard. Fairly new in the image processing industry, GigE is gain-

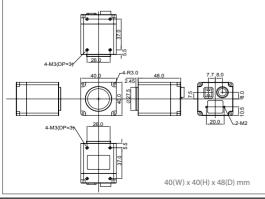
ing more interest thanks to users who are familiar with the Ethernet interface and technology. This new interface is expected to lift the barriers of bandwidth limitation found in other interfaces such as FireWire and USB 2.0. It also resolves the limitation of cable length by supporting 100 meter distance

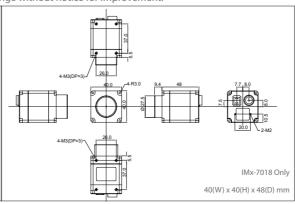
with conventional CAT-5 cable. The new GigE vision camera not only supports the traditional Machine Vision applications; but it also supports intelligent traffic systems, medical imaging, high-tech security and more.

As GigE is a relatively new standard, we expect more and more customers to demand new and additional feature support. We also expect a growing desire for software interoperability due to GigE's excellent network interface capability.

Specification		IMx-7020G	IMx-7018G	IMx-7017G	IMx-7016G	IMx-7015G	IMx-7012G	IMx-7011G			
Image Sensor		1/1.8" CCD ICX274 AL/AQ	2/3" CCD ICX285 AL/AQ	1/2" CCD ICX267 AL/AK	1/3" CCD ICX445 AL/AQ	1/3" CCD ICX204 AL/AK	1/2" CCD ICX414 AL/AQ	1/3" CCD ICX424 AL/AQ			
Picture Size		1624(H) x 1232(V) (*1624 x 1228)	1388(H) x 1040(V) (*1388 x 1036)	1388(H) x 1040(V) (*1388 x 1036)	1288(H) x 964(V) (*1288 x 960)	1032(H) x 776(V) (*1028 x 772)	656(H) x 484(V) (*652 x 480)	656(H) x 488(V) (*652 x 484)			
Data Depth		8 bit or 12 bit B/W (*YUV 4:2:2 / YUV 4:1:1)									
Pixel Size		4.40 x 4.40 μm	6.45 x 6.45 μm	4.65 x 4.65 μm	3.75 x 3.75 μm	4.65 x 4.65 μm	9.9 x 9.9 μm	7.40 x 7.40 μm			
Max FPS / Max Res.		16fps	30 fps	30 fps	30 fps	30fps	86 fps	86 fps			
Scanning System		Progressive Scan									
Binning		2x2 2x2 (only Mono)									
ROI		Partial Scan (Unit: 4x4)									
Trigger	Edge	Rising Edge or Falling Edge									
	Mode	0, 1, 2, 4, 5, 12, 13, 15									
	Source	External Trigger (Photo-coupler) or Software Trigger									
Strobe Output		Support Normal Mode or Trigger Mode (Photo-coupler) 0,1									
Memory Save/Load		9 Channels (0:factory, 1~4:feature, 5~8:mode/feature)									
SIO(RS-232)		Pass through or IMI-Tech Command									
Digital Interface		GigE Vision Interface compliant to GenlCam									
Gain Control		0 ~ 18 dB (Manual or Auto)									
Shutter Speed		1 μsec ~ 3600 sec									
S/N Ratio		56 dB Better									
Control Functions		Brightness, Sharpness, Gamma, Auto-Exposure, Auto-gain, Auto-Shutter, (*U/B, V/R, Hue/G (gain), Auto White Balance)									
Lens Mount		C / CS Mount									
External Dimension		40(W) x 40(H) x 48(D) mm / approx. 125 gram									









^{*} for Color Models

Amazon Series

Preliminary



For this reason, IMI, unlike most of the other camera manufactures, has developed it's own GigE interface, both on the software side and hardware side. This approach will provide IMI with the intellectual freedom to fully meet our customer's requirements. We have designed our Amazon GigE series with an interesting array of image sensors to support non-traditional vision applications.

Our Amazon GigE Series currently consists of 16 Sony Sensors and 10 Kodak Sensors providing a wide range of GigE Vision cameras, and with still more to come. IMI believes that GigE can provide both flexibility and cost effective solutions for your applications.

Specification		IMx-7160GK	IMx-7110GK	IMx-7040GK	IMx-7050G	IMx-7021GK	IMx-7020GK	IMx-7003GK		
Image Sensor		KAI-16000M	KAI-11002M	KAI-4021M	2/3" ICX 625AL/AQ	KAI-02150	KAI-2093	KAI-0340M		
Picture Size		4872(H) x 3248 (V)	4008(H) x 2672(V)	2048(H) x 2048(V)	2448(H) x 2048(V)	1920(H) x 1080(V)	1920(H) x 1080(V)	640(H) x 480(V)		
Data Depth		8 bit or 12 bit	8 bit or 12 bit	8 bit or 12 bit	8 bit or 12 bit	8 bit or 12 bit	8 bit or 12 bit	8 bit or 12 bit		
Pixel Size		7.40 x 7.40 μm	9.00 x 9.00 μm	7.40 x 7.40 μm	3.45 x 3.45 μm	5.5 x 5.5 μm	7.40 x 7.40 μm	7.40 x 7.40 μm		
Max FPS / Max Res.		3 fps	5 fps	16 fps	15 fps	30 fps	30 fps	200 fps		
Scanning System		Progressive Scan								
Binning		2x2 (only mono)								
Format 7		Partial Scan (Unit: 4x4)								
Trigger	Edge	Rising Edge or Falling Edge								
	Source	External Trigger or Software Trigger								
Strobe Output		Support Normal Mode or Trigger Mode.								
Memory Save/Load		9 Channels (0:factory, 1~4:feature, 5~8:mode/feature)								
SIO(RS-232)		Pass through or IMI-Tech Command								
Digital Interface		GigE Vision Interface compliant to GenlCam								
Gain Control		0 ~ 18 dB (Manual or Auto)								
Shutter Speed		1 μsec ~ 3600 sec								
S/N Ratio		56 dB Better								
Control Functions		Brightness, Sharpness, Gamma, Auto-Exposure, Auto-Shutter, (*U/B, V/R, Hue/G (digital gain), Auto White Balance)								
Lens Mount			F Mount		C/CS Mount					
External Dimension		66(W) x 66(H) >	< 51.5(D) mm / ap	prox. 290 gram	50(W) x 50(H) x 47(D) mm / approx. 200 gram					

^{**} Camera Specification and Features are subject to change without notice for improvement.

* for Color Models

