

High Road™ Compact GigE C – Color GigE Machine Vision Cameras

Features

- Progressive scan CCD image sensor
- Fully compliant with GenICam specification
- Variety of Cameras from up to 86 FPS at VGA and up to 3 FPS at 16M pixel
- Hardware supported YUV conversion
- External Trigger support Mode 0, 1, 2, 3, 4, 5, 12, 13, 14, 15
- Multi Camera Auto Sync support
- One shot and Multishot
- SIO Pass through and Strobe support
- True Fast Partial Scan support
- Horizontal and Vertical Binning Mode
- Firmware upgradable via LAN

Applications

- Machine Vision and Metrology
- Medical and Scientific Imaging
- Microscopy
- Remote sensing
- Traffic systems

High Resolution CCD Color Cameras with a Gigabit Ethernet Camera Interface and an External Trigger. For Machine Vision, Industrial, Traffic Systems, Remote Sensing, and Medical/Science Applications. Monochrome Versions also Available.



Overview

Our High Road Compact family of cameras is compliant with both Gigabit Ethernet and with the GigE Vision standard. Fairly new in the image processing industry, GigE is gaining 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.

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Specifications

Specifications	VCIMC-7020G	VCIMC-7018G	VCIMC-7017G	VCIMC-7016G	VCIMC-7015G	VCIMC-7012G	VCIMC-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)x1232(V) (*1624 x 1288)	1388(H)x1040(V) (*1388 x 1036)	1388(H)x1040(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)	640(H) x 488(V) (*652 x 484)
Data Path	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	9.90 x 9.90 μm	7.40 x 7.40 μm
Max FPS / Max Res.	16 fps	30 fps	30 fps	30 fps	30 fps	86 fps	86 fps
Scanning System	Progressive Scan						
Binning	2x2, 1x2	2x2 (only for B/W Models)					
ROI	Partial Scan (Unit: 4x4)						
Trigger	Edge	Rising Edge or Falling Edge					
	Mode	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 Command						
Digital Interface	GigE Vision Interface compliant to GenICam						
Gain Control	0 ~ 18 dB (Manual or Auto)						
Shutter Speed	1 μsec ~ 3600 sec						
S/N Ratio	56 dB or better						
Control Function	Brightness, Sharpness, Gamma, Auto-Exposure, Auto-gain, Auto-Shutter, (*U/B, V/R, Hue/G (digital gain), Auto White Balance (only for Color)						
Lens Mount	C / CS Mount						
External Dimensions	40(W) x 40(H) x 48(D) mm / approx. 125 grams						

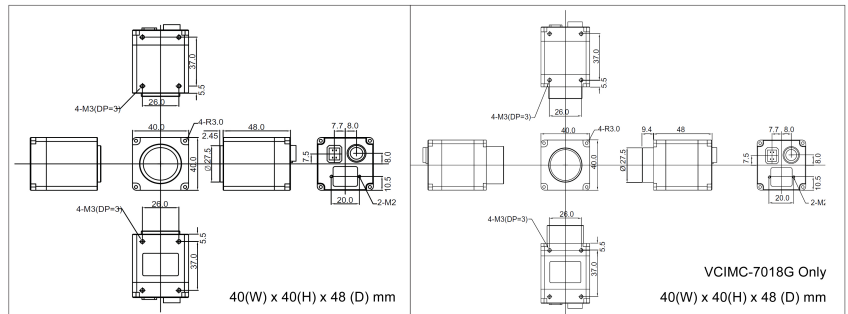
* For Color Models

12 Pin Hirose Connector Pin Out:

Pin	Signal	Pin	Signal
1	POWER GND	7	GND
2	Ext Power(+12V)	8	RX RS232
3	GND	9	TX RS232
4	Ext. Trigger	10	NC
5	Ext. Trigger GND	11	Strobe
6	NC	12	Strobe Power

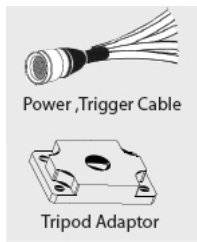
Pin	Signal
1	Damp -
2	Damp +
3	Drive +
4	Drive -

Camera Drawings



Ordering Information

VCIMC-7020G VCIMC-7018G
 VCIMC-7017G VCIMC-7016G
 VCIMC-7015G VCIMC-7012G
 VCIMC-7011G



Optional Accessories:
 Power, Trigger cable
 Tripod Adaptor

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