Visions Connection

High Road™ NIR GigE –Near-Infrared GigE Camera

Features

- **Near-infrared GigE camera**
- **High resolution – 1388 (H) x 1040 (V) pixels**
- **Progressive scan 2/3-inch CCD image sensor**
- **30 FPS at maximum resolution**
- **Can integrate up to 3 minutes**
- **Fully compliant with GenICam specification**
- **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

- **Failure analysis**
- **Polish wafer inspection**
- **Quartz analyses**
- **Low light level applications**
- **NIR imaging**
- **Biometrics security**
- **NIR microscopy**
- **Medical imaging**
- **NIR Hyperspectral imaging**

Near-Infrared GigE 1.4 Megapixel High Resolution 30 fps Monochrome Digital Camera. Designed for NIR Imaging, Biometrics Security, Microscopy, Medical Imaging, and NIR Hyperspectral Imaging.

Overview

The High Road™ NIR GigE is a compact near-infrared, progressive scan, CCD high-resolution industrial camera with a Gigabit Ethernet interface. 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.

Visions Connection
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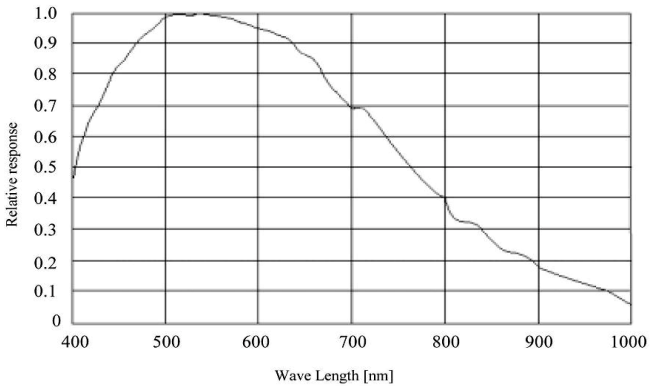
Specifications

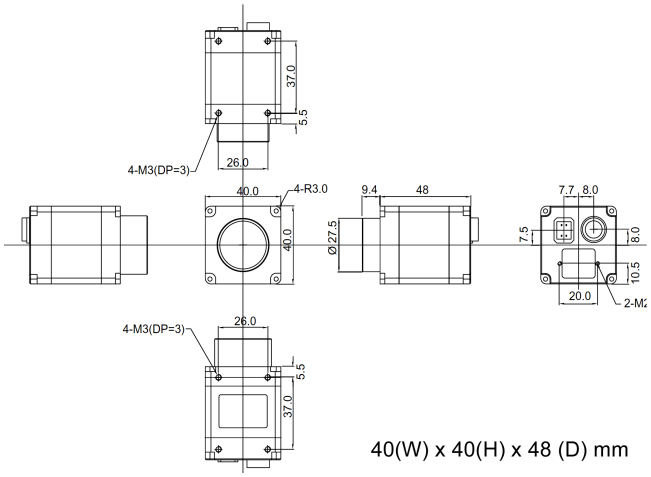
General Specifications

Image Sensor		2/3" CCD ICX285 AL/AQ
Picture Size		1388 (H) x 1040 (V)
Data Path		8 bit or 12 bit B/W (*YUV 4:2:2 / YUV 4:1:1)
Pixel Size		6.45 x 6.45 µm
Max FPS / Max Res.		30 fps
Scanning System		Progressive Scan
Binning		2 x 2
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)
Lens Mount		C / CS Mount
External Dimensions		40(W) x 40(H) x 48(D) mm Approximately125 grams

Typical QE Response



Camera Drawings

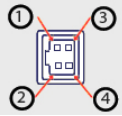


12 Pin Hirosie Connector Pin Out:

- Power/Trigger Port

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

- Auto Iris Connector Port



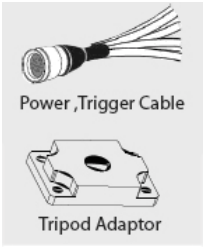
Pin	Signal
1	Damp -
2	Damp +
3	Drive +
4	Drive -

Ordering Information

VCIMB-7018G: High Road Compact GigE Near-Infrared Camera

Available in color for high sensitivity.

Optional Accessories:
Power, Trigger cable
Tripod Adaptor



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