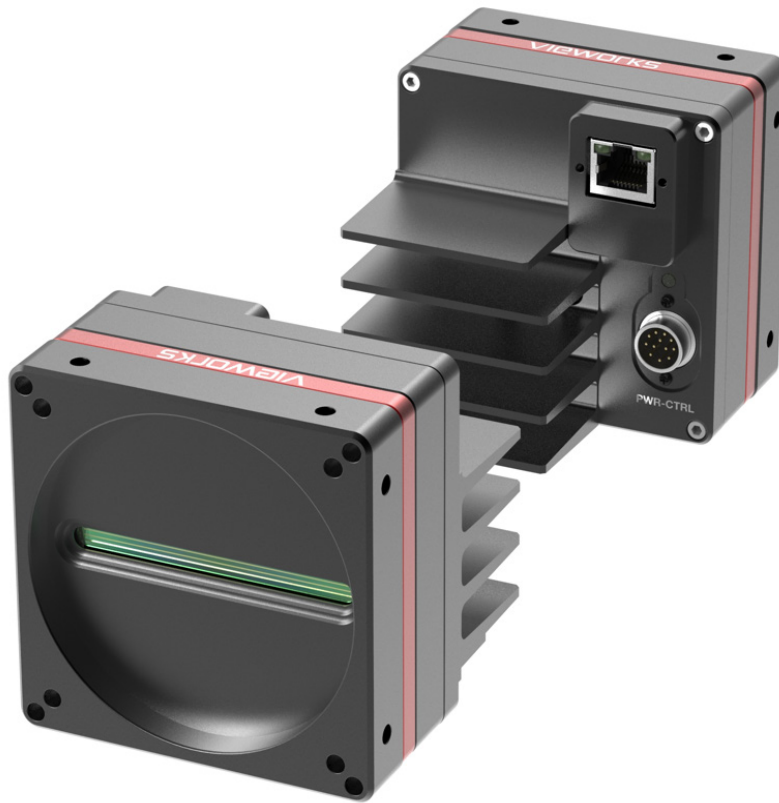


Preliminary

# VL-8K7XG-M/C VL-16K3.5XG-M/C

Line Scan Cameras with 10GigE Interface



VL-8K7XG-M/C and VL-16K3.5XG-M/C, the new line scan cameras provide a fast line rate equipped with the 10GigE (10GBASE-T) interface, compatible with NBASE-T (10GigE, 5GigE, 2.5GigE and 1GigE). The VL-8K7XG-M/C cameras feature line rates of up to 100kHz at 8K resolution. The VL-16K3.5XG-M/C cameras feature line rates of up to 60kHz at 16K resolution. The GL7008 image sensor supports  $7\mu\text{m}$  pixel lines at 8k resolution, and the GL3516 image sensor supports  $3.5\mu\text{m}$  pixel lines at 16k resolution. VL-8K7XG-M/C and VL-16K3.5XG-M/C are small format cameras compatible with M72 and F-mount lenses. Featuring high speed and color variation, the VL-8K7XG-M/C and VL-16K3.5XG-M/C cameras are ideal for a wide range of demanding applications, such as food and agricultural inspection, pharmaceutical inspection, wood inspection, and fabric inspection.

**VIEWORKS**

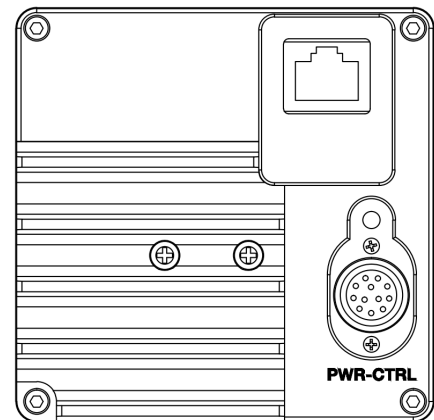
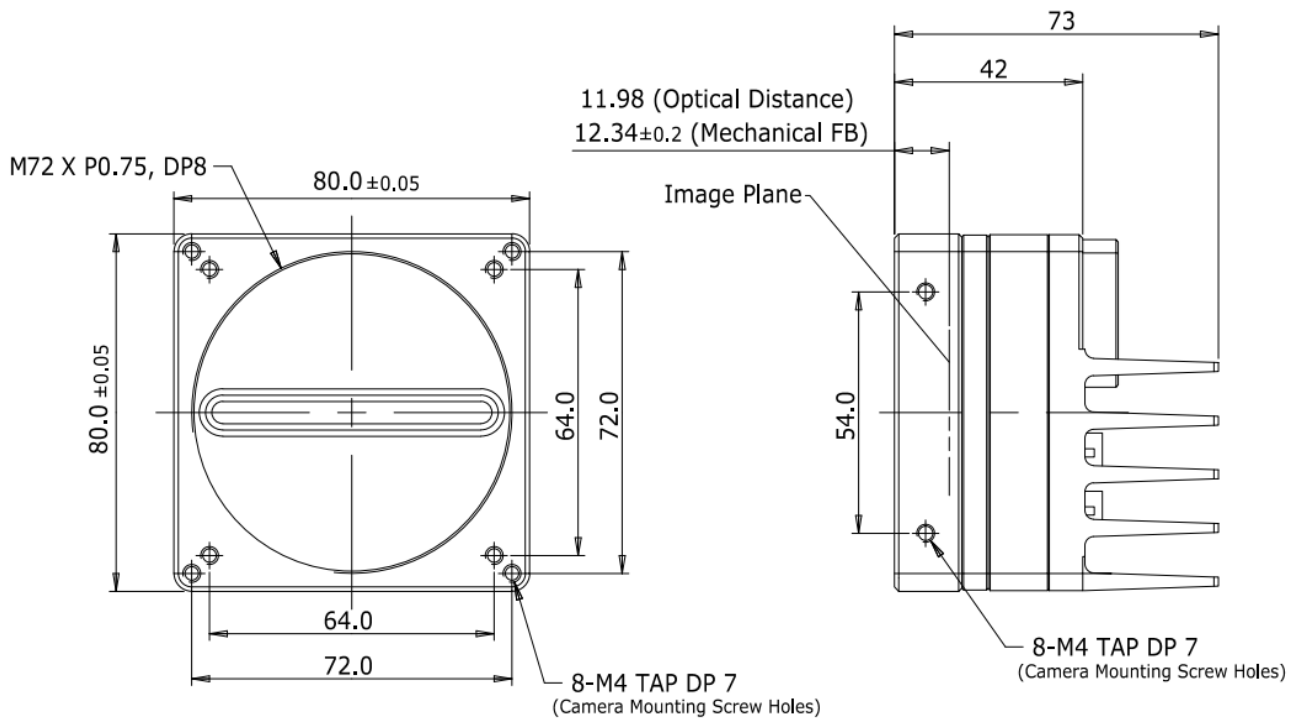
[vision.vieworks.com](http://vision.vieworks.com)

# VL-8K7XG-M/C / VL-16K3.5XG-M/C

Line Scan Camera with 10GigE Interface (10GBASE-T)

## Mechanical Dimensions

Unit: mm



# VL-8K7XG-M/C / VL-16K3.5XG-M/C

Line Scan Camera with 10GigE Interface (10GBASE-T)

## Main Features

- M72-mount based 8k / 16k Line Scan Cameras
- Supports 10GBASE-T and backward compatibility NBASE-T (10GigE, 5GigE, 2.5GigE, 1GigE)
- Supports 2 stage TDI (Mono)
- GL7008 8k color supports 4-line true color with RGBW Quad-Linear method
- Individual Gain/Exposure Control
- Supports PoE (IEEE 802.3af)
- Optimized for M72, 80x80mm size (F-Mount possible when using adapter)
- GenICam Compatible – XML based Control

## Applications

- Food & Agricultural Inspection
- Pharmaceutical Inspection
- Wood Inspection
- Fabric Inspection

## Specifications

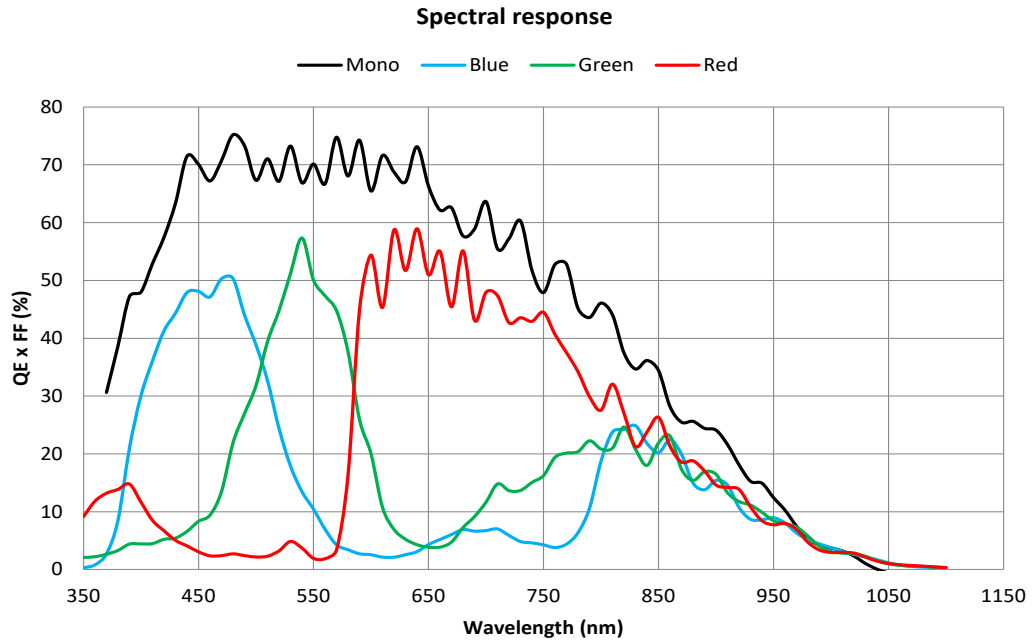
Model	VL-8K7XG-M100I-2	VL-8K7XG-C33I-4	VL-16K3.5XG-M60I-2	VL-16K3.5XG-C30I-2
Resolution (H × V)	8192 × 1/2 (Single/Dual Mode)	8192 × 3/4 (Triple/ Quad Line Mode)	16384 × 1/2 (Single/Dual Mode)	16384 × 2
Sensor	GL7008		GL3516	
Pixel Size	7.0 μm × 7.0 μm		3.5 μm × 3.5 μm	
Interface	10 GigE (Nbase-T)			
Dynamic Range	>61dB		>54dB	
Max.Line Rate	Single: 100KHz Dual: 50KHz	Triple (RGB): 33KHz Quad (RGBa): 25KHz	Single: 60KHz Dual: 30KHz	30KHz
Pixel Data Format	Mono 8/10/12 Mono 10/12 Packed	RGB8/10/12 bit(Triple) BGR8/10/12 bit(Triple) RGBa8/BGRa8(Quad)	Mono 8/10 Mono 10 Packed	RGB8/10 bit BGR8/10 bit
Black Level Control	-2048 ~ 2047 at 12 bit		-512 ~ 511 at 10 bit	
Gain Control	Individual Band Gain: x1.0 ~ x4.0 Digital Gain: x1.0 ~ x32.0			
Exposure Time	0.1~1000μs (All or Individual band)			
Trigger Synchronization	Free-Run, External Trigger Signal			
External Trigger	External, 3.3V ~ 5.0V			
Gamma Correction	User defined LUT (Look Up Table)			
Offset and Gain Correction	DSNU, PRNU			
Lens Mount	M72-mount			
Mechanical	80mm x 80mm x 71mm, 505g			
Temperature	Ambient Operating: 0°C~40°C (Housing: 10°C~55°C), Storage: -40°C~70°C			
Power	External Dissipation PoE	11 ~ 24V Typical: 12W IEEE 802.3af		
API SDK		Vieworks Imaging Solution 7.x		

# VL-8K7XG-M/C / VL-16K3.5XG-M/C

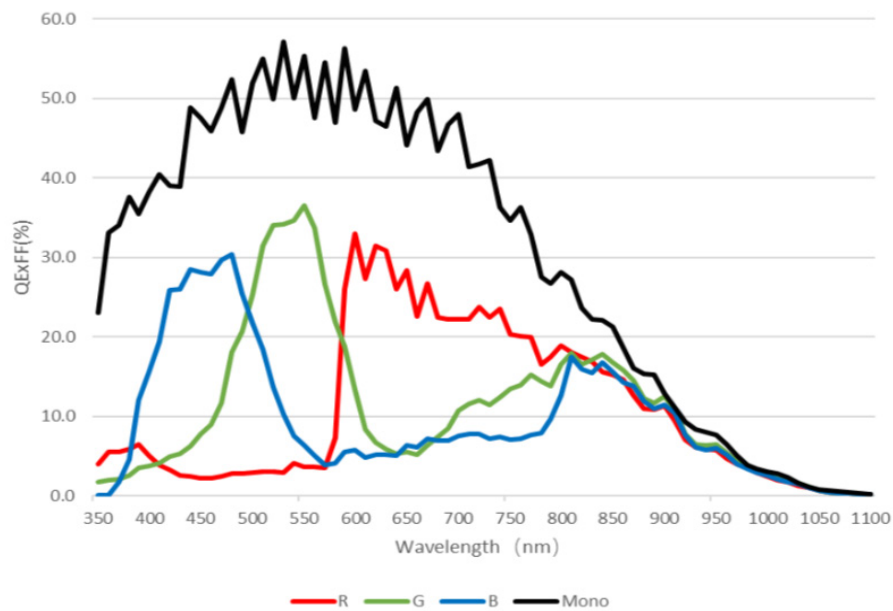
Line Scan Camera with 10GigE Interface (10GBASE-T)

## Spectral Response

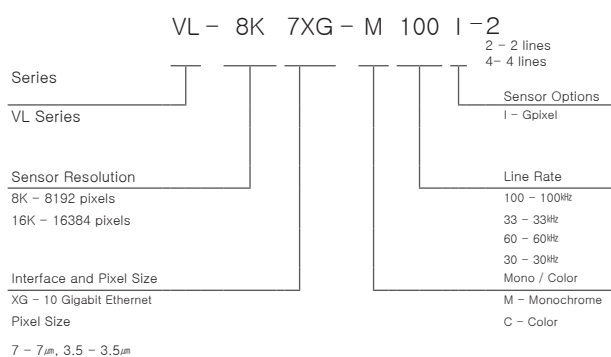
- VL-8K7XG-M/C



- VL-16K3.5XG-M/C

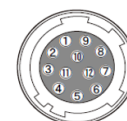


## Ordering Scheme



## Connector Specification

Power/Control



- |                  |                   |
|------------------|-------------------|
| 1: DC Ground     | 2: +12 VDC        |
| 3: Output-       | 4: Output+        |
| 5: Output-       | 6: Trigger IN     |
| 7: Not connected | 8: Not connected  |
| 9: Direction IN  | 10: Framestart IN |
| 11: +12 VDC      | 12: Output-       |

Connectors on camera body