

VL-16K3.5X2 Series

High Sensitivity & High Speed Line Scan Camera



CoaXPress®

The VL-16K3.5X2-M120I-2 and VL-16K3.5X2-C60I-2, the latest models of the industrial proven VL series, are new 16k CMOS line scan cameras available with the CoaXPress 2.0 interface.

The VL-16K3.5X2-M120I-2 camera delivers a maximum line rate of 120 kHz at 16k resolution.

Even higher resolution, up to 16,384 pixel resolution at 120 kHz line rate can be achieved using the VL-16K3.5X2-M120I-2 camera. The VL-16K3.5X2-C60I-2, the color line scan cameras, are also available for your color applications and color detection.

Featuring high sensitivity and high speed, these cameras are ideal for wide range of demanding applications such as flat panel display inspection, printed circuit board inspection, and high-performance document scanning.

VIEWWORKS

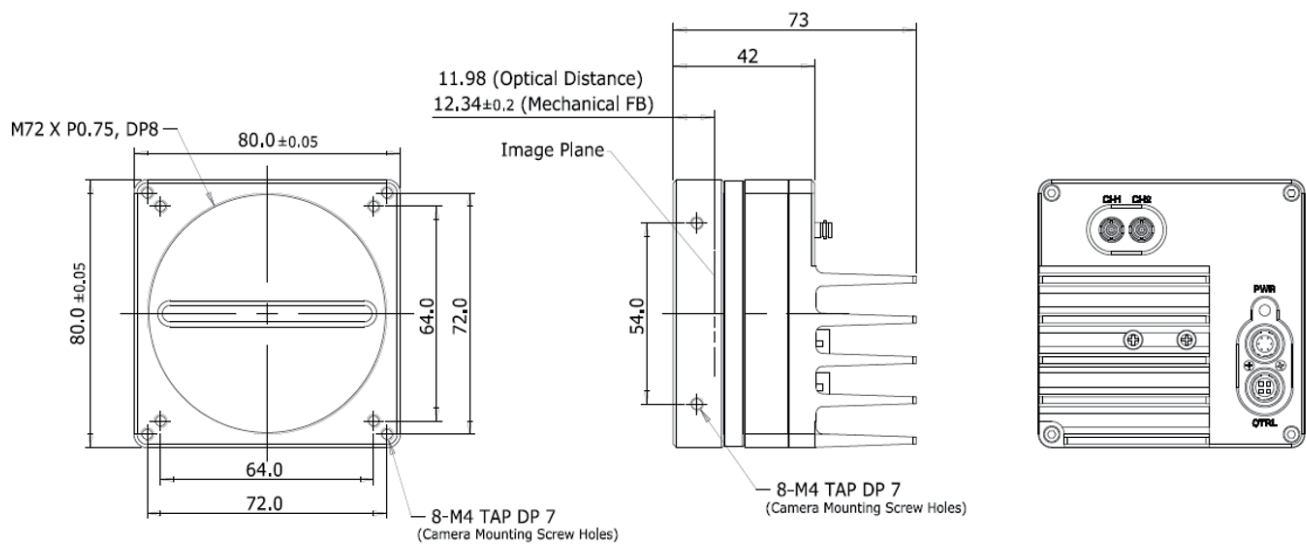
vision.viewworks.com

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Mechanical Dimensions

Unit: mm



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Main Features

- CMOS Line Scan
- CXP-12 Interface (2ch, Total 25Gbps)
- Advanced PRNU, DSNU Correction by color (RGB)
- Maximum 16k Pixel Resolution
- Individual Gain / Exposure Control
- PoCXP Compliant
- GenICam Compatible -XML based Control

Applications

- Flat Panel Display Inspection
- Printed Circuit Board Inspection
- High Performance Document Scanning
- Printing and Packaging System

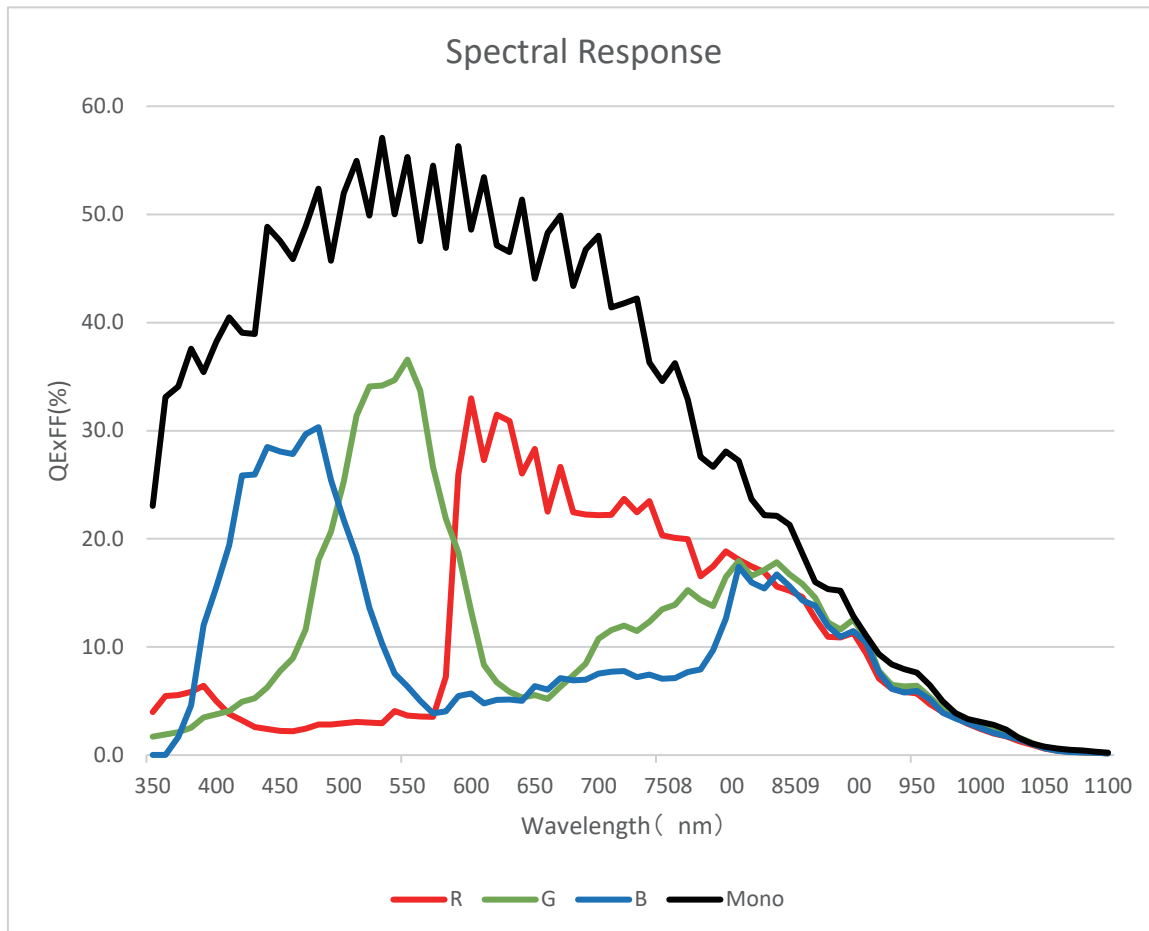
Specifications

Model		VL-16K3.5X2-M120I-2	VL-16K3.5X2-C60I-2
Resolution (H × V)		16,384 × 1/2 (Single, Dual)	16,384 × 2
Sensor		Gpixel GL3516	
Mono / Color		Mono	Color
Pixel Size		3.5 μm × 3.5 μm	
Electronic Shutter		Global Shutter	
Interface		CXP-12 2CH	
Max. Line Rate		Single: 120 kHz Dual: 60 kHz	Mono: 60 kHz RGB: 50 kHz
Exposure Time		0.1 ~ 1000.00 μs (per individual band)	
Pixel Format		Mono 8/10 bit	Mono 8/10 bit Color RGB 8/10 bit
Trigger Synchronization		Free-Run, Hardware Trigger, CoaXPress	
External Trigger		3.3 V ~ 5.0 V	
Dynamic Range		56 dB	
Black Level		from -512 to 511 LSB at 10 bits	
Gain Control	Individual Gain	1.00× ~ 4.00×	
	Gain All	1.00× ~ 32.00×	
Lens Mount		M72-mount	
Dimension / Weight		80 mm × 80 mm × 71 mm / 505 g	
Temperature		Ambient Operating: 0°C ~ 40°C (Housing: 10°C ~ 55°C) Storage: -40°C ~ 70°C	
Power	External	11 ~ 24 VDC	
	Dissipation	Typ. 11 W	
	PoCXP	24 VDC, Minimum of two PoCXP cables required	
Compliance		CE, FCC, KC	

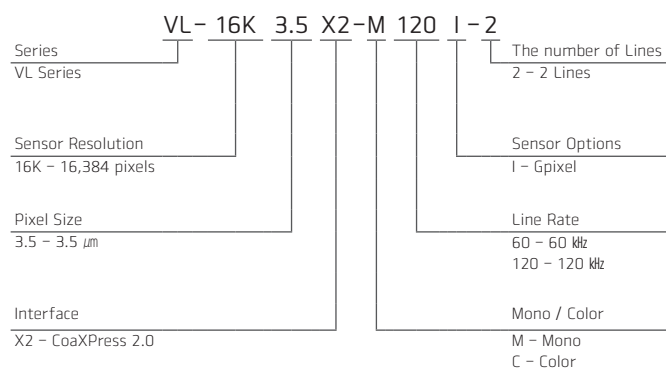
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Quantum Efficiency

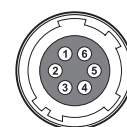


Ordering Scheme



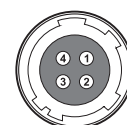
Connector Specification

Power



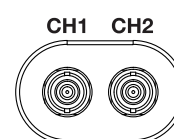
1 2 3: +12 VDC, 4 5 6: GND
(HR10A-7R-6PB)

Control



1: Trigger IN, 2: Direction IN
3: DC Ground, 4: Strobe OUT+
(HR10A-7R-4S)

Data Transfer / Communications



CH1: Master Connection

75 Ω , Micro-BNC(HD-BNC)

Connectors on camera body