

VL-2K/4K Series

High Sensitivity & High Speed Line Scan Cameras



The cameras in the VL-2K/4K series are new 2k and 4k CMOS line scan cameras available with the Camera Link interface. The VL-2K7C-M200I-2 camera delivers a maximum line rate of 200 kHz at 2k resolution. Even higher resolution, up to 4096 pixel resolution at 200 kHz line rate can be achieved using the VL-4K7C-M200I-2 camera. The VL-2K7C-C100I-2 and VL-4K7C-C100I-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.

VIEWORKS

vision.vieworks.com

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Main Features

- CMOS Line Scan
- Camera Link Full Interface
- Max. 4 k Pixel Resolution
- Dual Integration Mode
- Exposure Control
- PoCL Compliant
- GenICam Compatible –XML based Control

Applications

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

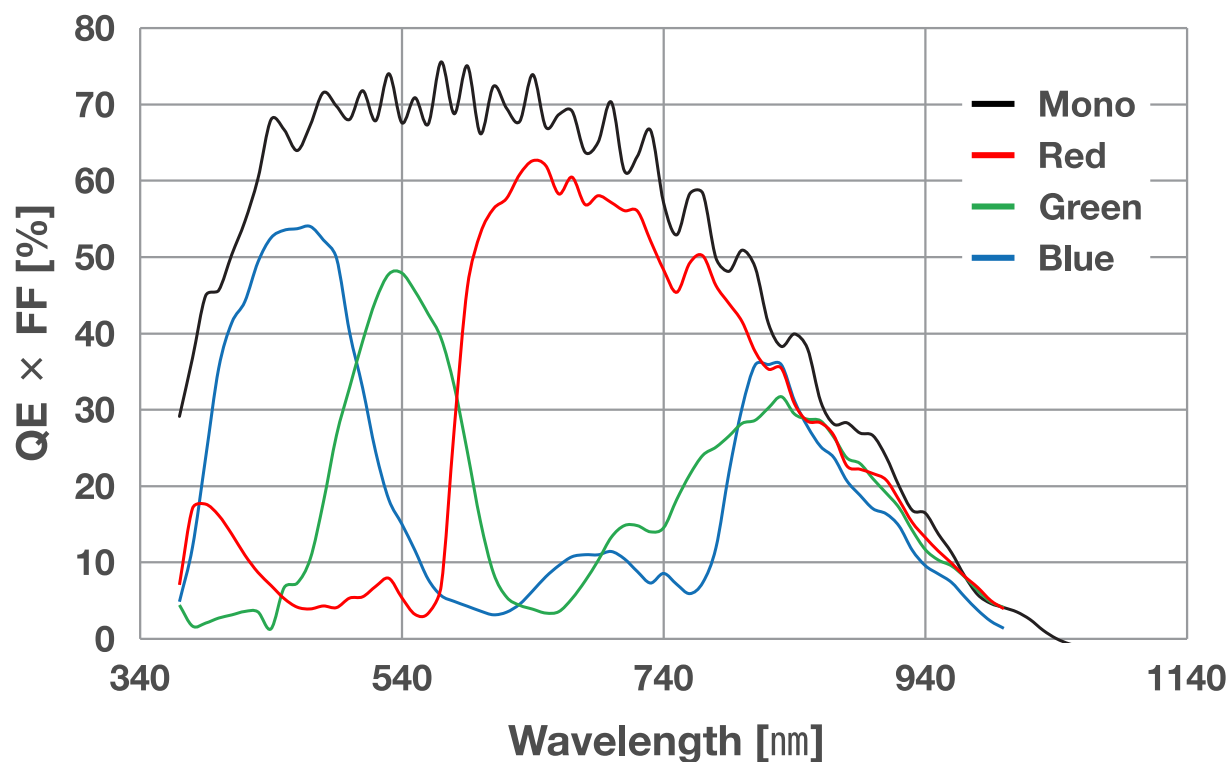
Specifications

Model		VL-2K7C-M200I-2	VL-2K7C-C100I-2	VL-4K7C-M200I-2	VL-4K7C-M120I-1	VL-4K7C-C100I-2	VL-4K7C-C60I-2
Resolution (H × V)		2048 × 2		4096 × 2			
Sensor		Vieworks		Gpixel GL0402			
Mono / Color		Mono	Color	Mono		Color	
Pixel Size		7.0 μm × 7.0 μm					
Data Output Mode		2 Tap: 8/10/12 bit	2 Tap: 8/10/12 bit	2 Tap: 8/10/12 bit	2 Tap: 8/10 bit	2 Tap: 8/10/12 bit	2 Tap: 8/10 bit
		3 Tap: 8/10/12 bit	3 Tap: 8/10/12 bit	3 Tap: 8/10/12 bit	3 Tap: 8/10 bit	3 Tap: 8/10/12 bit	3 Tap: 8/10 bit
		4 Tap: 8/10/12 bit	4 Tap: 8/10/12 bit	4 Tap: 8/10/12 bit	4 Tap: 8/10 bit	4 Tap: 8/10/12 bit	4 Tap: 8/10 bit
		8 Tap: 8/10 bit	6 Tap: 8 bit	8 Tap: 8/10 bit	8 Tap: 8/10 bit	6 Tap: 8 bit	6 Tap: 8 bit
		10 Tap: 8 bit	8 Tap: 8/10 bit	10 Tap: 8 bit	10 Tap: 8 bit	8 Tap: 8/10 bit	8 Tap: 8/10 bit
Interface		Camera Link Base / Medium / Full / 10 Tap, 26-pin SDR Connector					
Max. Line Rate		200 KHz	100 KHz	200 KHz	120 KHz	100 KHz	60 KHz
Exposure time		1.00 ~ 1000.00 μs					
Pixel Format	Mono	Mono 8/10/12			Mono 8/10	Mono 8/10/12	Mono 8/10
	Color	N/A	BiColorRGBG 8/10/12	N/A		BiColorRGBG 8/10/12	BiColorRGBG 8/10
			RGB 8/10/12			RGB 8/10/12	RGB 8/10
			BGR 8/10/12			BGR 8/10/12	BGR 8/10
Pixel Clock Speed		45/65/85 MHz			50 MHz	45/65/85 MHz	50 MHz
Binning	Sensor(H×V)	2 × 2	N/A	2 × 2	N/A	N/A	N/A
	Logic(H×V)	1 × 2, 2 × 2					
Trigger Synchronization		Free-Run, Hardware Trigger, CC1					
External Trigger		3.3 V ~ 5.0 V					
Dynamic Range		62 dB					
Black Level		from -4096 to 4095 LSB at 12 bit			from -256 to 255 LSB at 10 bit	from -4096 to 4095 LSB at 12 bit	from -256 to 255 LSB at 10 bit
Gain	Analog Gain	1.25×, 1.75×, 2.00×, 3.00×, 4.00×					
Control	Digital Gain	1.00× ~ 32.00×					
Lens Mount		M42 × 1.0 mm (Sensor to Camera Front: 10.10 mm)					
Dimension / Weight		60 mm × 60 mm × 37.1 mm / 224 g					
Temperature		Ambient Operating: 0℃ ~ 40℃ (Housing: 0℃ ~ 60℃), Storage: -40℃ ~ 70℃					
Power	External	10 – 30 VDC					
	Dissipation	Typ. 6.8 W			Typ. 5.1 W	Typ. 6.8 W	Typ. 5.1 W
	PoCL	PoCL Compliant – Two PoCL cables required					
Compliance		CE, FCC, KC, UL	CE, FCC, KC, UKCA, UL	CE, FCC, KC, UL		CE, FCC, KC, UKCA, UL	CE, FCC, KC, UL

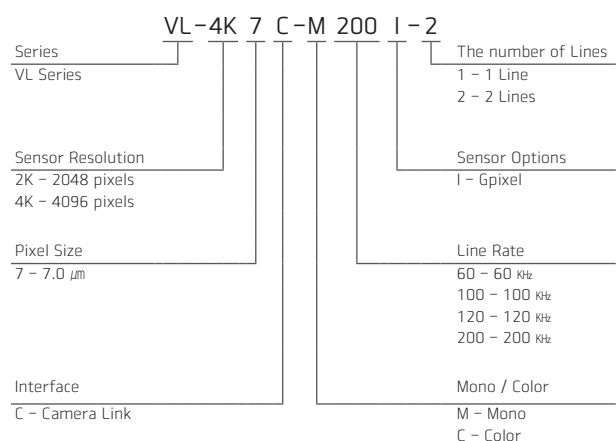
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Quantum Efficiency

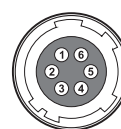


Ordering Scheme



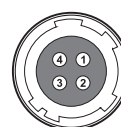
Connector Specification

Power



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

Control



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

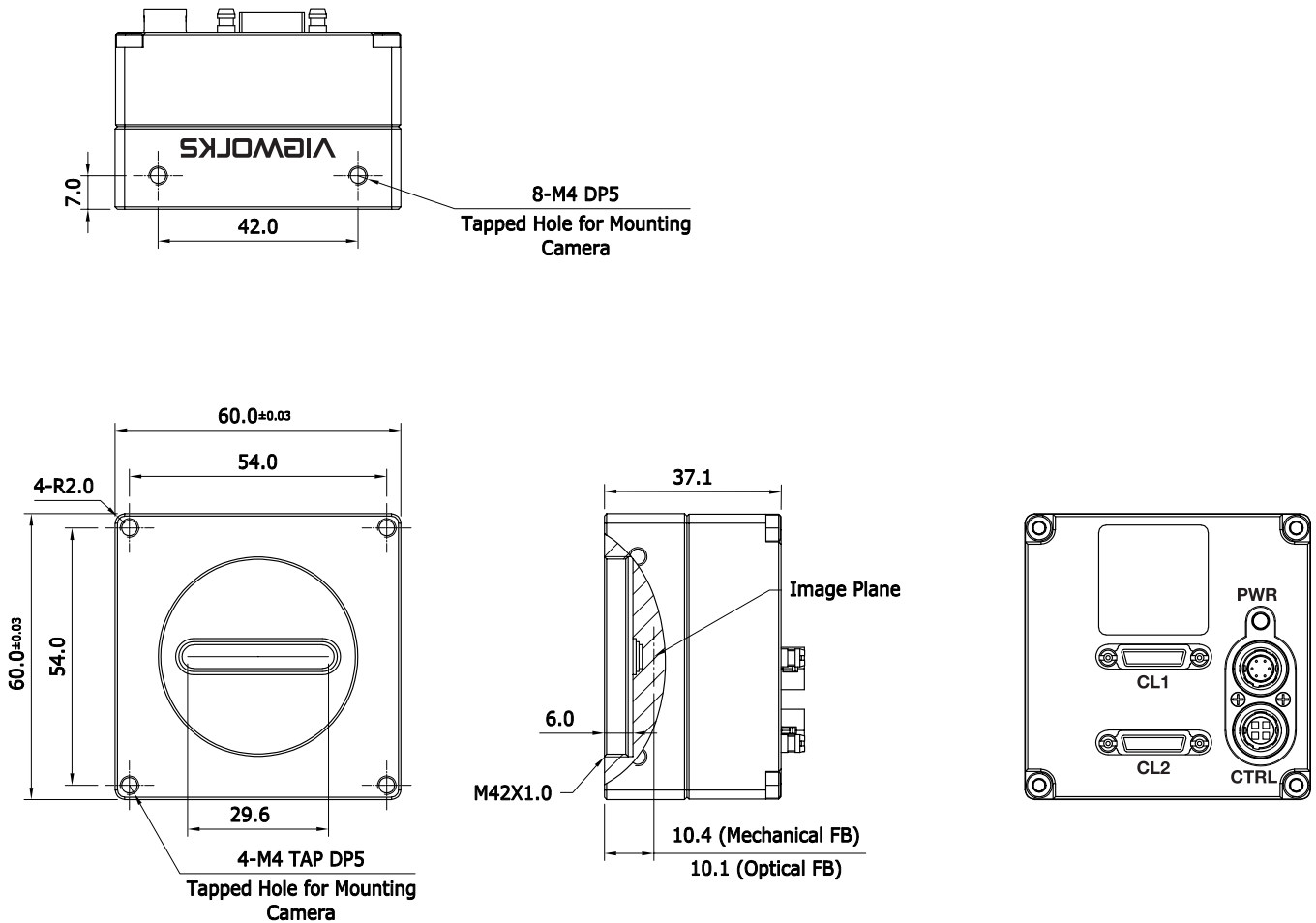
Connectors on camera body

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Mechanical Dimensions

Unit: mm



최적의 ALL-IN-1 솔루션을 제안합니다.

솔루션, 제품, 서비스에 대해 궁금하신 내용을 남겨주시면 빠른 시일 내로 회신 드리겠습니다.



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