

Line scan cameras with your choice of resolution

VL Series



VL-2K

2k / Up to 200 kHz

Dual line scan



VL-4K

4k / Up to 200 kHz

Dual line scan



VL-8K

8k / Up to 80 kHz

Single/dual line scan



VL-16K

16k / Up to 50 kHz

Single line scan

For more information please contact:



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Line scan cameras ranging from 2k to 16k resolution

VL Series line scan cameras come in 2k, 4k, 8k, and 16k resolution. All models except VL-16K are available in both monochrome and color, allowing for a wide range of applications. Grab one of these cameras for your application—print inspection, label inspection, automatic sorting system, surface inspection, wafer inspection, and more!

Features

- From 2k to 16k resolution
- Up to 200 kHz line rate
- Monochrome/color
(VL-16K monochrome only)

Applications

- Print inspection
- Label inspection
- Automatic sorting system
- Surface inspection
- Wafer inspection

Product Introduction Video



Specifications

■ VL-2K, VL-4K

Model	VL-2K7C-M200 I-2	VL-2K7C-C100 I-2	VL-4K7C-M200 I-2	VL-4K7C-C100 I-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 3 Tap - 8/10/12 bit 4 Tap - 8/10/12 bit 8 Tap - 8 bit 10 Tap - 8 bit	2 Tap - 8/10/12 bit 3 Tap - 8/10/12 bit 4 Tap - 8/10/12 bit 6 Tap - 8 bit 8 Tap - 8 bit 10 Tap - 8 bit	2 Tap - 8/10/12 bit 3 Tap - 8/10/12 bit 4 Tap - 8/10/12 bit 8 Tap - 8 bit 10 Tap - 8 bit	2 Tap - 8/10/12 bit 3 Tap - 8/10/12 bit 4 Tap - 8/10/12 bit 6 Tap - 8 bit 8 Tap - 8 bit 10 Tap - 8 bit
Interface	Camera Link Base / Medium / Full / 10 Tap, 26-pin SDR Connector			
Max. Line Rate	200 KHz	100 KHz	200 KHz	100 KHz
Exposure time	1.00 ~ 1000.00 μs			
Pixel Format	Mono	Mono8 / Mono10 / Mono12		
	Color	N/A	BiColorRGBG 8/10/12 RGB 8/10/12 BGR 8/10/12	N/A BiColorRGBG 8/10/12 RGB 8/10/12 BGR 8/10/12
Camera Link Pixel Clock Speed	45 / 65 / 85 MHz			
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 bits			
Gain Control	Analog Gain	1.25×, 1.75×, 2.00×, 3.00×, 4.00×		
	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°C ~ 40°C (Housing: 0°C ~ 60°C), Storage: -40°C ~ 70°C			
Power	External	10 - 30 V DC		
	Dissipation	Typ. 6.8 W		
	PoCL	PoCL Compliant - Two PoCL cables required		
Compliance	CE, FCC, KC (in preparation)			

- VL-8K, VL-16K

Model	VL-8K7C-M80F-2	VL-16K3.5C-M50F-1
Resolution (H × V)	8192 × 2	16384 × 1
Sensor (AMS)	Dragster DR-2x8k-7	Dragster DR-16k-3.5
Sensor Type	Linear CMOS	
Pixel Size	7.0 μm × 7.0 μm	3.5 μm × 3.5 μm
Sensor Output	2 / 4 / 8 Tap	
Interface	Camera Link Base / Medium / Full, 26-pin MDR Connector	
Max. Line Rate	80 Mhz	50 Mhz
Exposure time	2.00 μs ~ 10000.00 μs (0.01 μs step)	
Pixel Data Format	8 bit (2 / 4 / 8 / 10 Tap) / 10 bit (2 / 4 Tap) / 12 bit (2 / 4 Tap)	
Camera Link Pixel Clock Speed	50 / 60 / 70 / 85 Mhz	
Dual Line Mode	Supported	N/A
Acquisition Mode	Single Line / Dual Line	Single Line
Image Direction	CC3 or Programmable	N/A
Trigger Synchronization	Free-Run, External Sync, External Sync Converter	
Dynamic Range	66 dB	64 dB
Black Level	0 ~ 2048 LSB at 12 bit	
Digital Gain	1.00× ~ 32.00×	
Max. Cable Length	10 m (@ 85 Mhz, Standard Camera Link Cable)	
Lens Mount	M72 × 0.75 mm (Sensor to Camera Front: 12 mm)	
Dimension / Weight	80 mm × 80 mm × 54 mm / 420 g	
Temperature	Ambient Operating: 0°C ~ 40°C (Housing: 10°C ~ 50°C), Storage: -40°C ~ 70°C	
Power	External	8 ~ 28 V DC
	Dissipation	Typ. 8.0 W
Compliance	CE, FCC, KC	
Configuration Software	Configurator	

- VL-8K (color model)

Model	VL-8K7C-C80F-2	
Resolution (H × V)	8192 × 2	
Sensor (AMS)	Dragster DR-2x8k-7-RGB	
Sensor Type	Linear CMOS	
Pixel Size	7.0 μm × 7.0 μm	
Sensor Output	2 / 3 / 4 / 8 Tap	
Interface	Camera Link Base / Medium / Full, 26-pin MDR Connector	
Max. Line Rate	80 Mhz	
Exposure time	2.00 μs ~ 10000.00 μs (0.01 μs step)	
Pixel Data Format	8 bit (2 / 3 / 4 / 8 Tap) / 10 bit (2 / 4 Tap) / 12 bit (2 / 4 Tap)	
Camera Link Pixel Clock Speed	50 / 60 / 70 / 85 Mhz	
Trigger Synchronization	Free-Run, External Sync, External Sync Converter	
Dynamic Range	56 dB	
Black Level	0 ~ 2048 LSB at 12 bit	
Digital Gain	1.00× ~ 32.00×	
Max. Cable Length	10 m (@ 85 Mhz, Standard Camera Link Cable)	
Lens Mount	M72 × 0.75 mm (Sensor to Camera Front: 12 mm)	
Dimension / Weight	80 mm × 80 mm × 54 mm / 420 g	
Temperature	Ambient Operating: 0°C ~ 40°C (Housing: 0°C ~ 60°C), Storage: -40°C ~ 70°C	
Power	External	8 ~ 28 V DC
	Dissipation	Typ. 9.0 W
Compliance	CE, FCC, KC	
Configuration Software	Configurator	