

VA-1MC / VA-2MC / VA-4MC VA-8MC / VA-16MC / VA-29MC

1 / 2 / 4 / 8 / 16 / 29 MEGAPIXEL RESOLUTION HIGH SPEED PROGRAMMABLE DIGITAL CAMERA





VA Series cameras are progressive scan high performance digital cameras based on the latest 5.5 μ m 4-tap CCD sensor technology of Truesense Imaging, Inc. (formerly Kodak Imaging Solutions).

Truesense Imaging's new 4-tap readout structure results in 2× the frame rate as compared to previous generation image sensors. Frame rates as high as 125 frames per second at 1 million pixel resolution can be achieved. This camera series is ideal for demanding applications such as semi-conductor inspection, electronics inspection, aerial imaging inspection, and FPD inspection.

Main Features

- * Camera Link Interface
- * Truesense Imaging Progressive Scan Interline Transfer CCD Imager
- * 8 / 10 / 12 bit Data Output
- * 1 / 2 / 4 Tap for full resolution readout from 5 up to 120 fps
- * Field Upgradeable Firmware
- * Flat Field Correction
- * Pixel Defect Correction
- * Excellent anti-blooming and anti-smear

Applications

- * Machine Vision Inspection
- * Research and Scientific Imaging
- * Microscopy and Metrology
- * Remote Sensing and Scanning
- * Intelligent Transport System (ITS)

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Specifications					
Model	VA-1M	VA-2M	VA-2M (HD)	VA-4M	
Resolution ($H \times V$)	1024 × 1024	1600 × 1200	1920 × 1080	2336 × 1752	
Sensor (Truesense Imaging)	KAI-01050	KAI-02050	KAI-02150	KAI-04050	
Sensor Size (Optical Format)	1/2″	2/3″	2/3″	1″	
Sensor Type	Progressive Scan Interline Transfer CCD				
Pixel Size	5.5 μ m $ imes$ 5.5 μ m				
Max. Frame Rate	125 fps	70 fps	67 fps	33 fps	
Electronic Shutter	Global Shutter				
Pixel Data Format	8 / 10 / 12 bit				
Interface	Base Camera Link				
Camera Link Clock Speed	40 / 80 MHz				
Trigger Mode	Free-Run, Standard, Fast, Double, Overlap				
mgger mode	Programmable Exposure Time and Trigger Polarity				
Dynamic Range	64 dB				
Dimension / Weight	68 mm \times 68 mm \times 54 mm / 420 g (with C-mount)				
Dimension7 weight	68 mm \times 68 mm \times 83 mm / 460 g (with F-mount)				
Temperature	Operating: -5° C ~ 40° C, Storage: -30° C ~ 65° C				
Lens Mount	C-mount or F-mount, Custom mount available upon request				
Power	10 ~ 14 V DC, Max. 6W				
Configuration Software	Configurator				

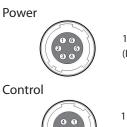
Specifications

Model	VA-8M	VA-16M	VA-29M		
Resolution (H \times V)	3296 × 2472	4896 × 3264	6576 × 4384		
Sensor (Truesense Imaging)	KAI-08050	KAI-16050	KAI-29050		
Sensor Size (Optical Format)	4/3″	32 mm (APS-H)	35 mm		
Sensor Type	Progressive Scan Interline Transfer CCD				
Pixel Size	5.5 μ m $ imes$ 5.5 μ m				
Max. Frame Rate	16 fps	8 fps	5 fps		
Electronic Shutter	Global Shutter				
Pixel Data Format	8 / 10 / 12 bit				
Interface	Base Camera Link				
Camera Link Clock Speed	40 / 80 MHz				
Trigger Mode	Free-Run, Standard, Fast, Double, Overlap Programmable Exposure Time and Trigger Polarity				
Dynamic Range	64 dB				
Dimension / Weight	$68 \text{ mm} \times 68 \text{ mm} \times 54 \text{ mm} / 420 \text{ g} \text{ (with C-mount)} \qquad 68 \text{ mm} \times 68 \text{ mm} \times 104 \text{ mm} / 68 m$				
	$68 \text{ mm} \times 68 \text{ mm} \times 83 \text{ mm} / 460 \text{ g (with F-mount)} 500 \text{ g (with F-mount)}$				
Temperature	Operating: -5°C ~ 40°C, Storage: −30°C ~ 65°C				
Lens Mount	C-mount or F-mount, Custom mount available upon request				
Power	10 ~ 14 V DC, Max. 6W 10~14 V DC, Max. 8W				
Configuration Software	Configurator				

Ordering Scheme

<u>VA</u> - <u>29M</u> <u>C</u> - <u>M</u> <u>5</u> <u>A0</u>					
Series		Sensor Options			
VA Series		A0 - Truesense Imaging			
Sensor Resolution		Frame Rate			
1M-1 Megapixels2M-2 Megapixels4M-4 Megapixels8M-8 Megapixels16M-16 Megapixels29M-29 Megapixels		5 - 5 fps 8 - 8 fps 16 - 16 fps 33 - 33 fps 67 - 67 fps 70 - 70 fps 125 - 125 fps			
Interface C - Camera Link		Mono / Color M - Monochrome C - Color			

Connector Specification



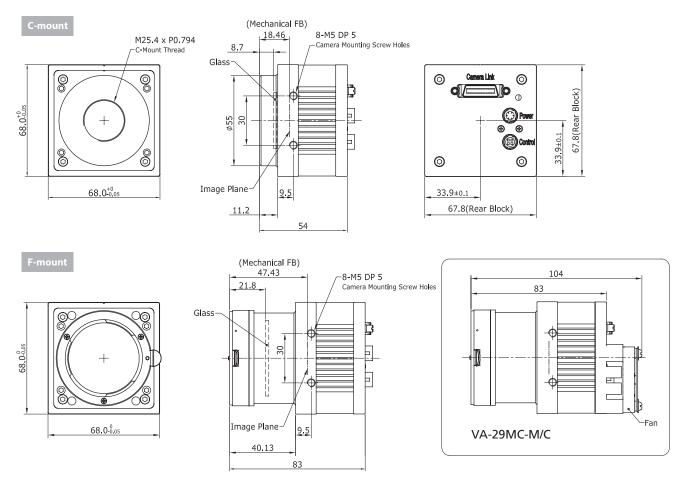
1 2 3:+12V DC, 4 5 6:GND (HR10A-7R-6PB)

1 : Trigger IN+, 2 : Trigger IN-3 : Strobe OUT- (GND), 4 : Strobe OUT+ (HR10A-7R-4SB)

Connectors on camera body

Mechanical Dimensions

Unit : mm



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ISO-9001, ISO-13485

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