preliminary

VA-47MC-7 VA-47MX-9

HIGH RESOLUTION 47 MEGAPIXEL CCD CAMERAS

AVAILABLE IN CAMERA LINK OR COAXPRESS INTERFACE





The VA-47MC and VA-47MX, the latest members of the industrial proven VA series, are new 47 megapixel resolution CCD cameras available in Camera Link or CoaXPress interface. Both the VA-47MC and VA-47MX use the latest 47 megapixel CCD imaging sensor (KAI-47051) technology from On Semiconductor, and offer frame rate of 7 fps and 9 fps at full resolution respectively.

Equipped with the Vieworks' advanced technologies proved by world top FPD manufacturers, the VA–47M cameras offer not only highly uniformed images but also high speed image capabilities.

Featured with high resolution and high speed, this brand new technology is ideal for demanding applications such as flat panel display inspection, electronics inspection, aerial imaging, and ground surveillance.



VA-47MC-7 / VA-47MX-9

High Resolution 47 megapixels CCD cameras available in Camera Link or CoaXPress interface

Main Features

- * Progressive Scan IT CCD Imager (On Semi)
- * 16 Taps Readout
- * High Dynamic Range up to 68 dB
- * Camera Link Medium Interface up to 7 fps
- * CoaXPress Interface up to 9 fps at 12.5 Gbps using 2 CH
- * Field Upgradable Firmware
- * Excellent Anti-blooming and Anti-smear
- * Flat Field Correction
- * Advanced PRNU and DSNU Correction
- * Tap Linearity Correction

Applications

- * Flat Panel Display Inspection
- * Electronics and Semiconductor Inspection
- * Aerial Imaging
- * Ground Surveillance

Specifications



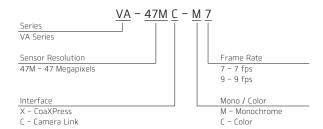
Model	VA-47MC-M/C 7
Resolution (H × V)	8856 × 5280
Pixel Size	5.5 μm × 5.5 μm
Sensor	On Semi KAI 47051
Sensor Size (Optical Diagonal)	56.7 mm
Sensor Type	Progressive Scan Interline Transfer CCD
Sensor Output	- 16 Tap
Interface	Camera Link Medium
Max. Frame Rate	7 fps
Exposure Time	TBD μs ~ 60 s
Partial Scan (Max. Speed)	TBD fps at TBD Lines
Pixel Data Format	8 / 10 / 12 bit
Electronic Shutter	Global Shutter
Data Output Pixel Clock Speed	40 MHz
Exposure Mode	Free-Run, Timed, Trigger Width
Dynamic Range	68 dB
Binning	×1, ×2, ×4 (Horizontal and Vertical Independent)
Black Level	Adjustable (0 ~ 256 LSB at 12 bit)
Video Gain	×1 ~ ×4
Dimension / Weight	85 mm $ imes$ 85 mm $ imes$ 86 mm / 710 g
Lens Mount	M72-mount, Custom mount available upon request
Temperature	Operating: -5°C ~ 40°C, Storage: -40°C ~ 70°C
Power	10 ~ 24 V DC, Typical 14 W
Compliance	CE, FCC, KC
Configuration Software	Configurator

Specifications



Model VA−47MX−M/C 9 Resolution (H × V) 8856 × 5280 Pixel Size 5.5 μm × 5.5 μm Sensor On Semi KAI 47051 Sensor Size (Optical Diagonal) 56.7 mm Sensor Type Progressive Scan Interline Transfer CCD Sensor Output 16 Tap Interface CoaXPress Max. Frame Rate 9 fps Exposure Time TBD μs ~ 60 s Partial Scan (Max. Speed) TBD fps at TBD Lines Pixel Data Format 8 / 10 / 12 bit Electronic Shutter Global Shutter Exposure Mode Free–Run, Timed, Trigger Width Oynamic Range 68 dB Binning ×1, ×2, ×4 (Horizontal and Vertical Independent) Black Level Adjustable (0 ~ 256 LSB at 12 bit) Video Gain ×1 ~ ×4 Dimension / Weight 85 mm × 85 mm × 86 mm / 710 g Lens Mount M72-mount, Custom mount available upon request Temperature Operating: -5°C ~ 40°C, Storage: -40°C ~ 70°C 10 ~ 24 V DC, Typical 14 W PoCXP 24 V DC Compliance <t< th=""><th></th><th></th><th></th></t<>			
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Black Level Video Gain X1 ~ X4 Dimension / Weight Lens Mount Temperature Adapter Power Adapter PoCXP Compliance Adjustable (0 ~ 256 LSB at 12 bit) X1 ~ X4 Adjustable (0 ~ 256 LSB at 12 bit) X1 ~ X4 X1 ~ X4 B5 mm × 85 mm × 86 mm / 710 g M72-mount, Custom mount available upon request Operating: -5°C ~ 40°C, Storage: -40°C ~ 70°C 10 ~ 24 V DC, Typical 14 W 24 V DC CE, FCC, KC	Dynamic Range		68 dB
Video Gain $\times 1 \sim \times 4$ Dimension / Weight $85 \text{ mm} \times 85 \text{ mm} \times 86 \text{ mm} / 710 \text{ g}$ Lens MountM72-mount, Custom mount available upon requestTemperatureOperating: $-5^{\circ}\text{C} \sim 40^{\circ}\text{C}$, Storage: $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$ PowerAdapter $10 \sim 24 \text{ V DC}$, Typical 14 W PoCXP 24 V DC ComplianceCE, FCC, KC	Binning		\times 1, \times 2, \times 4 (Horizontal and Vertical Independent)
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Power Adapter 10 ~ 24 V DC, Typical 14 W PoCXP 24 V DC Compliance CE, FCC, KC	Lens Mount		M72-mount, Custom mount available upon request
Power PoCXP 24 V DC Compliance CE, FCC, KC	Temperature		Operating: −5°C ~ 40°C, Storage: −40°C ~ 70°C
PoCXP 24 V DC Compliance CE, FCC, KC	Power	Adapter	10 ~ 24 V DC, Typical 14 W
·		PoCXP	24 V DC
API SDK Vieworks Imaging Solution 7.X	Compliance		CE, FCC, KC
	API SDK		Vieworks Imaging Solution 7.X

Ordering Scheme



Connector Specification

Power



1 2 3: +12V DC, 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



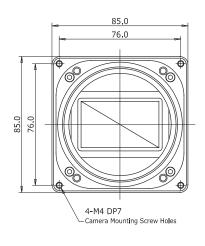
CH1: Master Connection (75 Ω , DIN 1.0/2.3)

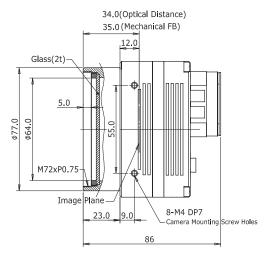
Connectors on camera body

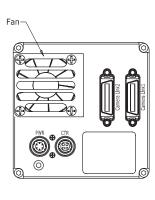
Mechanical Dimensions

Unit: mm

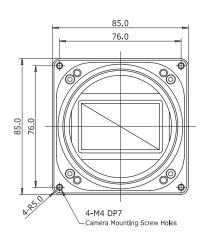
Camera Link

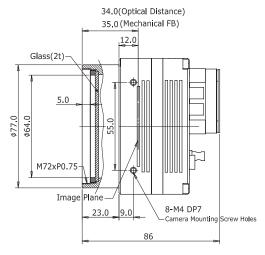


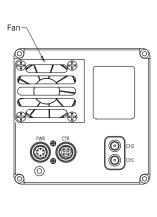




CoaXPress







* An optional heat sink (without a fan) model is available upon request.

For more information please contact local distributor or visit our website at http://www.vieworks.com.

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VW40-161-005

