VC-61MX-M/C 18 H

High Performance 61MP CMOS Digital Camera

CoaXPress®

Pyramid Imaging

The VC-61MX-18 H, the latest model of the industrial proven VC series, is a new 61 megapixel CoaXPress camera and based on the latest CMOS image sensor technology (IMX455) from Sony Semiconductor Solutions Corporation. The VC-61MX-18 H offers up to 17.9 frames per seconds at 9568 × 6380 resolution. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC-61MX camera offers not only highly uniformed images but also high speed image processing capabilities. Featuring high quality image uniformity and high speed, this camera is ideal for demanding applications such as FPD, PCB and semiconductor inspections.

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Main Features

- 61 Megapixel Resolution
- CoaXPress Interface up to 17.9 fps at 25 Gbps using 4 CH
- Electronic Rolling Shutter
- DSNU and PRNU Correction
- Flat Field Correction with Sequencer Control
- Hot Pixel Correction
- GenICam Compatible – XML based Control

Applications

- Flat Panel Display Inspection
- Electronics Inspection
- Semiconductor Inspection
- Document / Film Scanning

Specifications

Model		VC-61MX-M/C 18 H
Resolution (H × V)		9568 × 6380
Sensor		SONY IMX455
Max. Image Circle		Diagonal 43.3 ㎜ (Type 2.7)
Pixel Size		3.76 ㎛ × 3.76 ㎛
Interface		CoaXPress (CXP-3 / CXP-6)
Max. Frame Rate	8/10/12 bit	17.93 fps
	14 bit	9.99 fps
	16 bit	3.98 fps
Exposure Time (2-Line step)		17.33 ㎲ – 60 s
Partial Scan (Max. Speed)		2057.6 fps at 4 Lines
Binning	Sensor	×1, ×2, ×3 (Horizontal and Vertical Dependent, 8/10/12 bit only)
	Logic	×1, ×2, ×4 (Horizontal and Vertical Independent)
Pixel Data Format	Mono	Mono 8 / Mono 10 / Mono 12 / Mono 14 / Mono 16
	Color	RG Bayer 8 / RG Bayer 10 / RG Bayer 12 / RG Bayer 14 / RG Bayer 16
Electronic Shutter		Rolling Shutter
Trigger Synchronization	Overlapped	Free-Run
	Non-overlapped	Hardware Trigger, Software Trigger, CXP or User Output0
External Trigger		3.3 V ~ 24.0 V, 10 ㎃, Logical Level Input, Optically Isolated
Software Trigger		Asynchronous, Programmable via Camera API
Dynamic Range		78 dB
Gain Control	Analog	1× ~ 32×
	Digital	1× ~ 32×
Black Level Control		0 ~ 1023 LSB at 16 bit
Dimension / Weight		80.0 ㎜ × 80.0 ㎜ × 107.0 ㎜, 744 g (with F-mount)
Temperature		Operating: 0℃ ~ 40℃, Storage: -40℃ ~ 70℃
Lens Mount		F-mount, Custom mount available upon request
Power	External	11 ~ 24 V DC
	Dissipation	Typ. 16.0 W
	PoCXP	24 V DC, Minimum of two PoCXP cables required
Compliance		CE, FCC, KC (in preparation)
API SDK		Vieworks Imaging Solution 7.X

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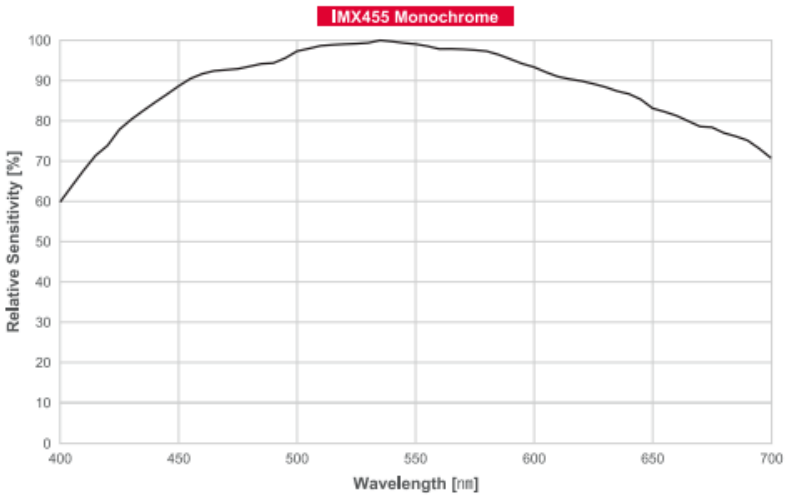
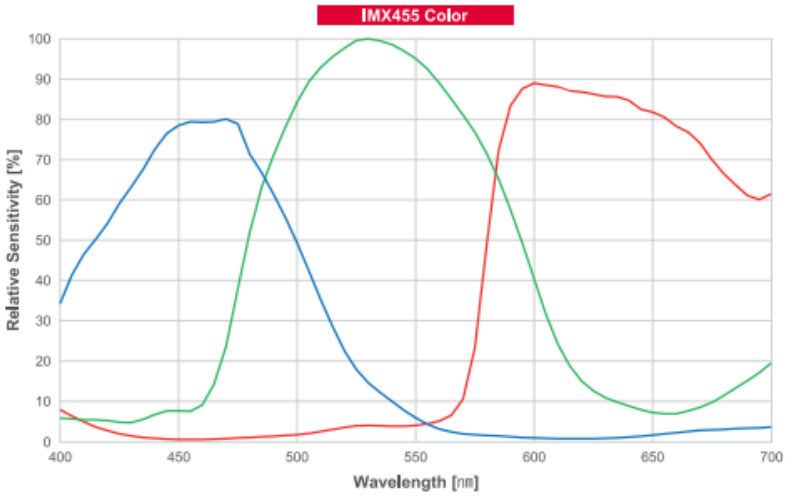
Relative Sensitivity Curves

* The sensitivity data may not match the measurement on the finished product necessarily because it is measured based on the wafer.





Ordering Scheme

VC - 61M X - M 18 H

- Series: VC Series
- Sensor Resolution: 61M - 61 Megapixels
- Interface: X - CoaXPress
- Mono / Color: M - Monochrome, C - Color
- Frame Rate: 18 - 17.93 fps
- Sensor Options: H - Sony CMOS (IMX)

Connector Specification

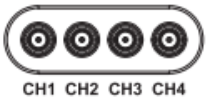
Power

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

Control

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

Data Transfer / Communications

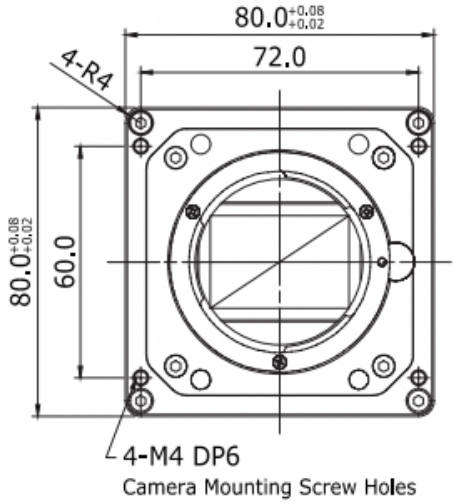


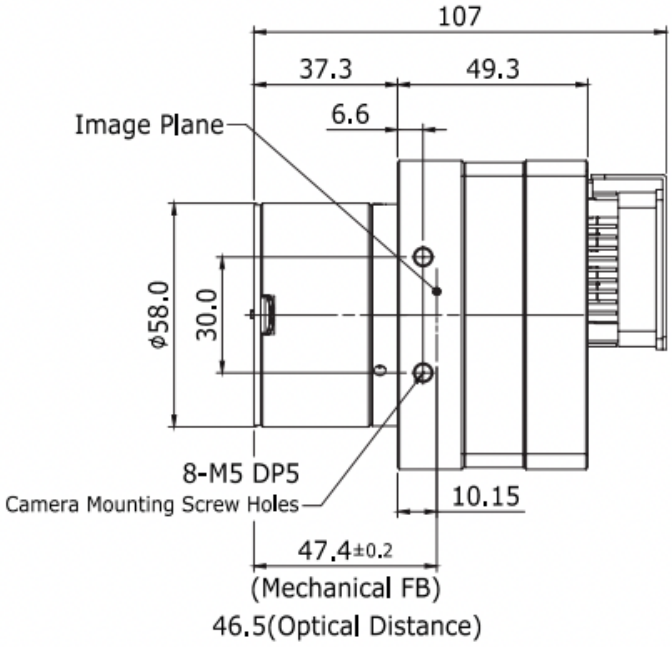
CH1: Master Connection
75 Ω, DIN 1.0/2.3

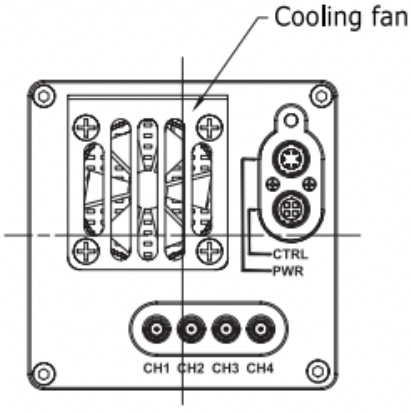
Connectors on camera body

Mechanical Dimensions

Unit: mm







Pyramid Imaging

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