

# VC-61MX-M/C 18 H

High Performance 61MP CMOS Digital Camera



CoaXPress®

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.

**VIEWORKS**

[vision.vieworks.com](http://vision.vieworks.com)

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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

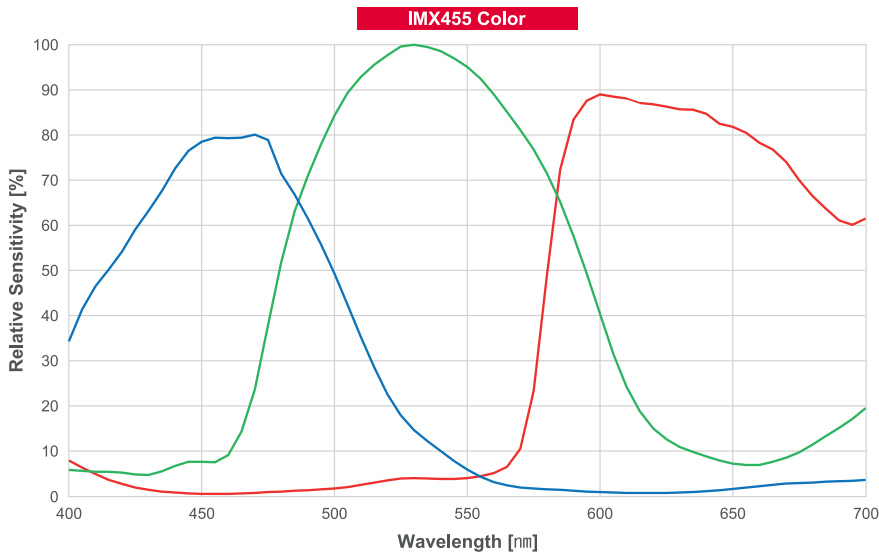
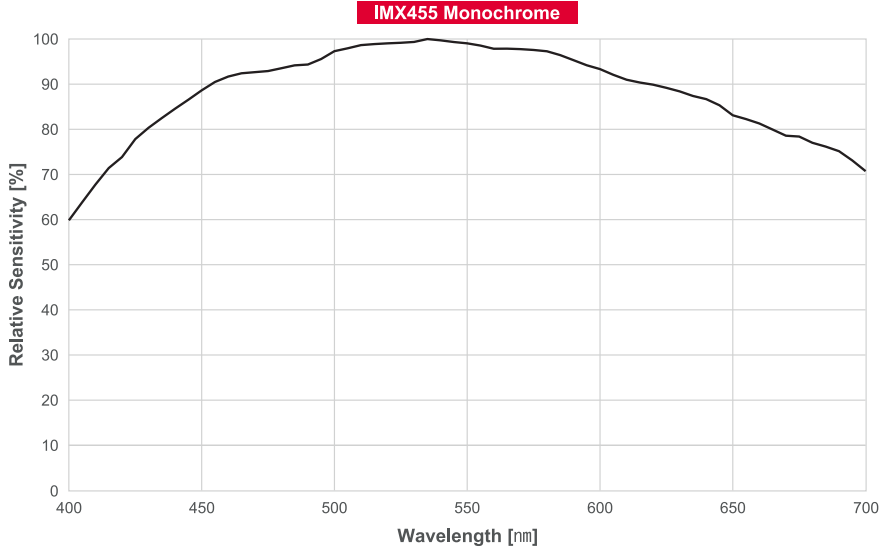
Model	VC-61MX-M/C 18 H	
Resolution (H × V)	9568 × 6380	
Sensor	SONY IMX455	
Max. Image Circle	Diagonal 43.3 mm (Type 2.7)	
Pixel Size	3.76 $\mu\text{m}$ × 3.76 $\mu\text{m}$	
Interface	CoaXPress (CXP-3 / CXP-6)	
Max. Frame Rate	8/10/12 bit	17.93 fps
	14 bit	9.99 fps
	16 bit	3.98 fps
Exposure Time (2-Line step)	17.33 $\mu\text{s}$ – 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 mA, 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 mm × 80.0 mm × 107.0 mm, 744 g (with F-mount)	
Temperature	Operating: 0°C ~ 40°C, Storage: -40°C ~ 70°C	
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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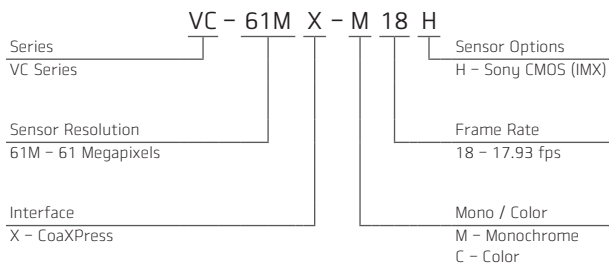
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## Relative Sensitivity Curves

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

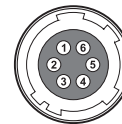


## Ordering Scheme



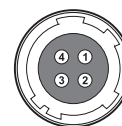
## Connector Specification

### Power



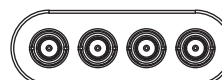
1, 2, 3: +12V DC  
4, 5, 6: GND  
(HR10A-7R-6PB)

### Control



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

### Data Transfer / Communications



CH1 CH2 CH3 CH4

CH1: Master Connection  
75 Ω, DIN 1.0/2.3

Connectors on camera body

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## Mechanical Dimensions

Unit: mm

