# VC-17MX-M/C 61 H VC-31MX-M/C 35 H

High Performance 17MP and 31MP CMOS Digital Cameras





The VC-17MX-61 H and VC-31MX-35 H, the latest models of the industrial proven VC series, are new 17 and 31 megapixel CoaXPress cameras and based on the latest CMOS image sensor technology (IMX387 and IMX342) from Sony Semiconductor Solutions Corporation. The VC-17MX-61 H offers up to 61.3 frames per second at  $5440 \times 3076$  resolution. For even higher resolution applications, the VC-31MX-35 H offers up to 35.4 frames per seconds at  $6464 \times 4852$  resolution.

Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC–17MX and VC–31MX cameras offer not only highly uniformed images but also high speed image processing capabilities. Featured with high quality image uniformity and high speed, these cameras are ideal for demanding applications such as FPD, PCB and semiconductor inspections.



#### VC-17MX-M/C 61 H / VC-31MX-M/C 35 H

High Performance 17MP and 31MP CMOS Digital Cameras

#### Main Features

- 17 / 31 Megapixel Resolution
- CoaXPress Interface up to 61.3 fps at 25 Gbps using 4 CH
- Global Shutter CMOS Technology
- Flat Field Correction with Sequencer Control
- PRNU Correction
- Hot Pixel Correction
- Defective Pixel Correction
- Frame Averaging
- GenlCam Compatible XML based Control

## **Applications**

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

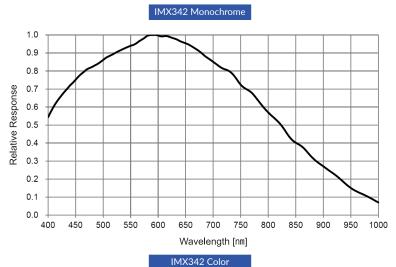
# **Specifications**

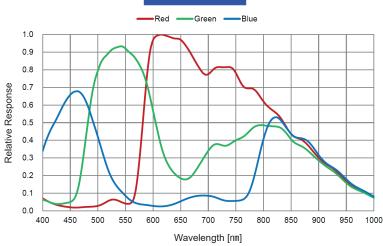
Model		VC-17MX-M/C 61 H	VC-31MX-M/C 35 H
Resolution (H $ imes$ V)		5440 × 3076	6464 × 4852
Sensor		SONY IMX387	SONY IMX342
Optical Format (Diagonal)		4/3" (21.7 mm)	APS-C (27.9 mm)
Pixel Size		3.45 µm × 3.45 µm	
Interface		CoaXPress (CXP-3 / CXP-6)	
Max. Frame Rate	8 bit	61.3 fps	35.4 fps
	10 bit	56.5 fps	35.4 fps
	12 bit	40.4 fps	25.8 fps
Exposure Time		2.4 μs - 60 s	
Partial Scan (Max. Speed)		1724.0 fps at 4 Lines	1464.7 fps at 4 Lines
Binning	Sensor	×1, ×2 (Horizontal and Vertical Dependent)	
Pixel Data Format	Mono	Mono 8 / Mono 10 / Mono 12	
	Color	RG Bayer 8 / RG Bayer 10 / RG Bayer 12	
Electronic Shutter		Global Shutter	
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger or CXP	
External Trigger		3.3 V $\sim$ 24.0 V, 10 mA, Logical Level Input, Optically Isolated	
Software Trigger		Asynchronous, Programmable via Camera API	
Dynamic Range		72 dB	
Gain Control		1×~32×	
Black Level Control		0 ~ 255 LSB at 12 bit	
Dimension / Weight		68 mm $\times$ 68 mm $\times$ 105 mm, 550 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. 17.0 W	
	PoCXP	24 V DC, Minimum of two PoCXP cables required	
Compliance		CE, FCC, KC (in preparation)	
API SDK		Vieworks Imaging Solution 7.X	

#### VC-17MX-M/C 61 H / VC-31MX-M/C 35 H

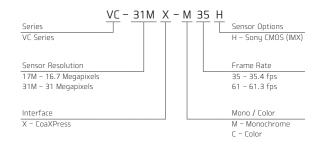
High Performance 17MP and 31MP CMOS Digital Cameras

## Relative Sensitivity Curves





# **Ordering Scheme**



# **Connector Specification**

#### Power



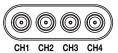
1, 2, 3: +12V DC 4, 5, 6: GND (HR10A-7R-6PB)

#### Control



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

Data Transfer / Communications



CH1: Master Connection 75  $\Omega$  , DIN 1.0/2.3

### **Mechanical Dimensions**

Unit: mm

