

VC-17MC-M/C 48 H VC-31MC-M/C 26 H

High Performance 17MP and 31MP CMOS Digital Cameras



The VC-17MC-48 H and VC-31MC-26 H, the latest models of the industrial proven VC series, are new 17 and 31 megapixel CMOS cameras available with the Camera Link interface. These cameras are based on the latest CMOS image sensor technology (IMX387 and IMX342) from Sony Semiconductor Solutions Corporation. The VC-17MC-48 H offers up to 48.4 frames per second at 5440 × 3076 resolution. For even higher resolution applications, the VC-31MC-26 H offers up to 26.2 frames per second at 6464 × 4852 resolution. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC-17MC and VC-31MC 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.

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Main Features

- 17 / 31 Megapixel Resolution
- Camera Link Full Interface
- Global Shutter CMOS Technology
- Flat Field Correction with Sequencer Control
- PRNU Correction
- Hot Pixel Correction
- Defective Pixel Correction
- Frame Averaging
- GenICam Compatible – XML based Control

Applications

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

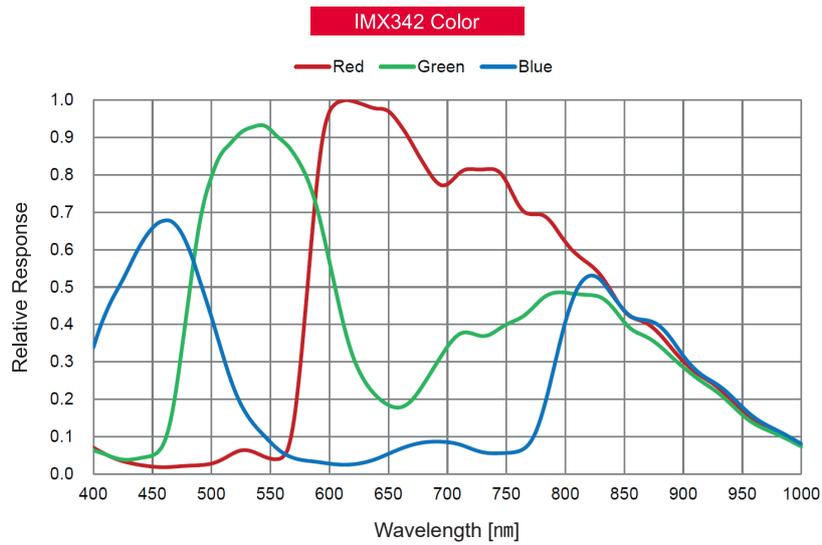
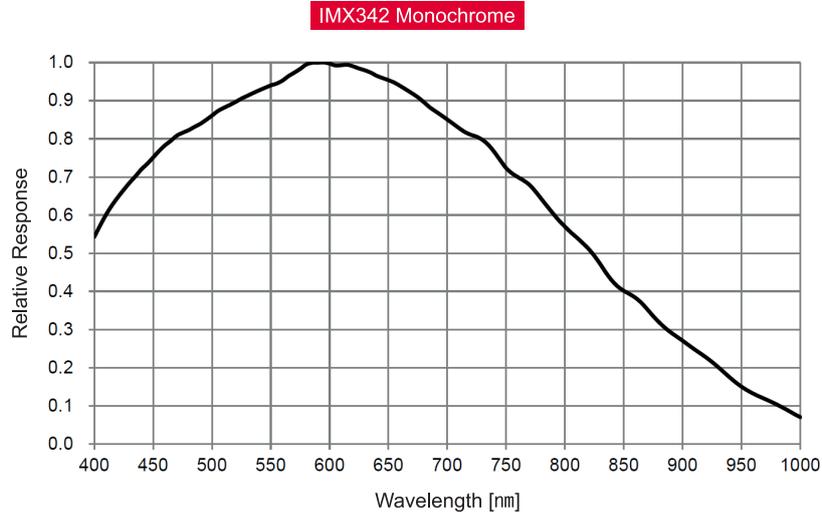
Specifications

Model		VC-17MC-M/C 48 H	VC-31MC-M/C 26 H
Resolution (H × 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		Camera Link Base / Medium / Full / 10 Tap, 26-pin SDR Connector	
Max. Frame Rate	2 Tap	9.8 fps	5.3 fps
	4 Tap	19.6 fps	10.6 fps
	8 Tap (8 bit)	38.9 fps	21.1 fps
	10 Tap (8 bit)	48.4 fps	26.2 fps
Exposure Time		2.4 μs – 60 s	
Partial Scan (Max. Speed)		1568.6 fps at 4 Lines	1442.3 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	
Data Output Pixel Clock Speed		65 MHz / 85 MHz	
Electronic Shutter		Global Shutter	
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger or CC1	
External Trigger		3.3 V ~ 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 × 68 mm × 105 mm, 537 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	
Compliance		CE, FCC, KC (in preparation)	
API SDK		Vieworks Imaging Solution 7.X	

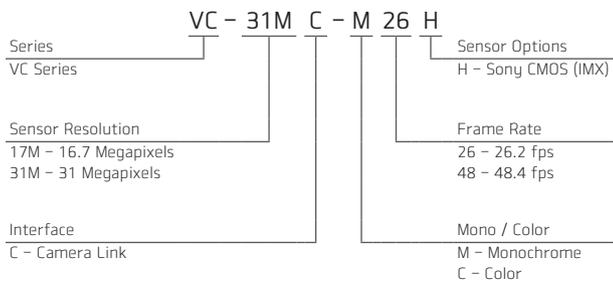
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Relative Sensitivity Curves



Ordering Scheme



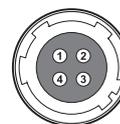
Connector Specification

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)

Connectors on camera body

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Mechanical Dimensions

Unit: mm

