

VP-31MC-M/C 26 H

31MP Thermoelectric Peltier Cooled Camera



The VP-31MC-26 H, the latest model of the industrial proven VP series, is a new 31 megapixel CMOS camera available with the Camera Link interface. This camera is based on the latest CMOS image sensor technology (IMX342) from Sony Semiconductor Solutions Corporation. The VP-31MC-26 H offers up to 26.2 frames per second at 6464 × 4852 resolution. This camera uses thermo-electric Peltier (TEC) cooling technology developed for and used by many demanding medical market customers. The TEC maintains the operating temperature of the image sensor at up to $15 \pm 2^{\circ}\text{C}$ below ambient temperature. The VP-31MC camera provides a stable operating condition and the ability to expose for a long period of time to increase the camera's sensitivity. Featuring high-speed and high-resolution with stable performance, this camera is ideal for demanding applications such as FPD, PCB and semiconductor inspections.

VIEWORKS

www.vieworks.com

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Main Features

- Thermoelectric Peltier Cooled – $15 \pm 2^\circ\text{C}$ below
- 31 Megapixel Resolution
- Camera Link Full Interface
- 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

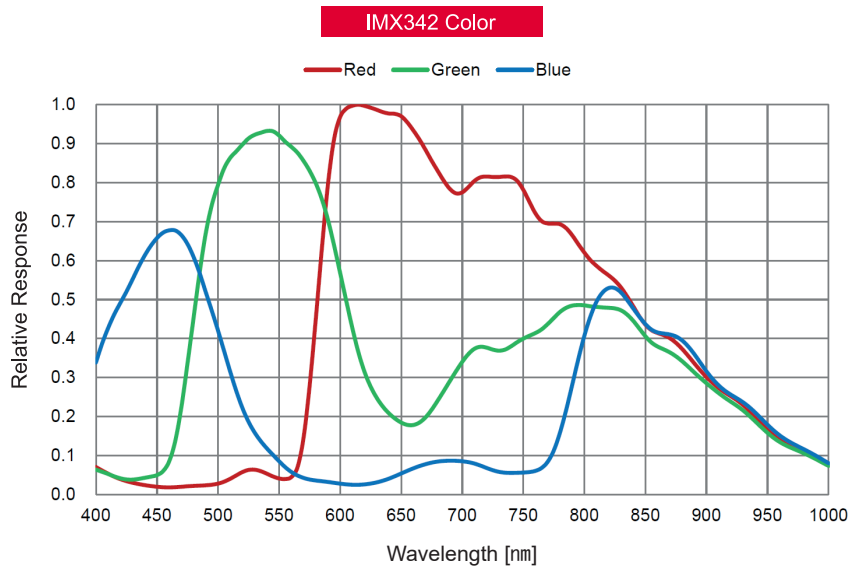
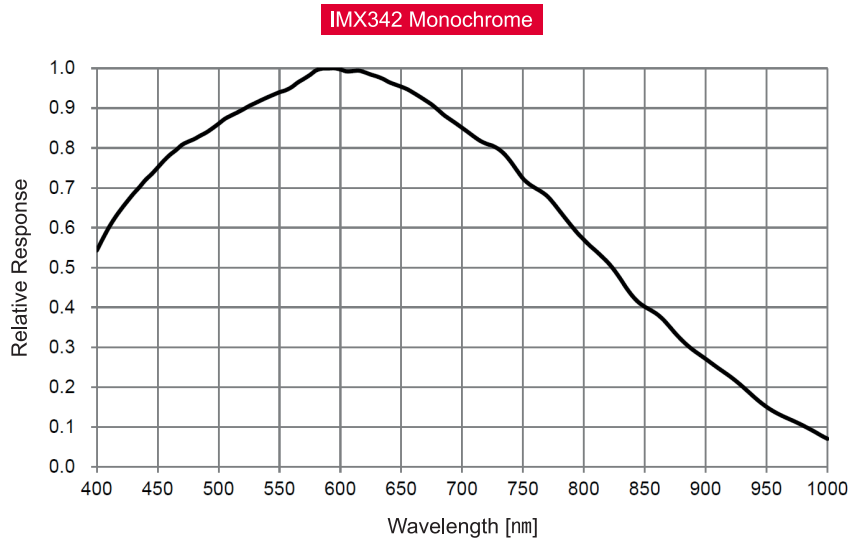
Specifications

Model	VC-31MC-M/C 26 H	
Resolution (H × V)	6464 × 4852	
Sensor	SONY IMX342	
Optical Format (Diagonal)	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	5.3 fps
	4 Tap	10.6 fps
	8 Tap (8 bit)	21.1 fps
	10 Tap (8 bit)	26.2 fps
Exposure Time	2.4 μs – 60 s	
Partial Scan (Max. Speed)	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	
Cooling Method	Thermoelectric Peltier Cooling	
Cooling Performance	$15 \pm 2^\circ\text{C}$ below ambient temperature – Standard cooling with a fan	
Dimension / Weight	90.0 mm × 90.0 mm × 129.3 mm, 1256.1 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. 30.0 W
Compliance	CE, FCC, KC (in preparation)	
API SDK	Vieworks Imaging Solution 7.X	

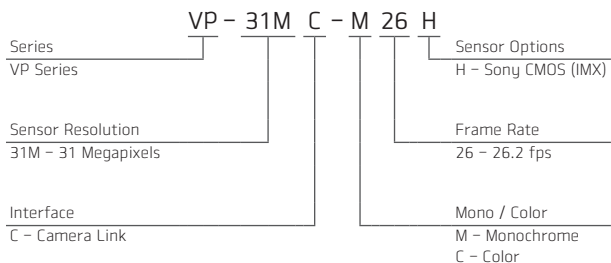
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Relative Sensitivity Curves

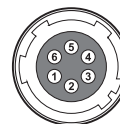


Ordering Scheme



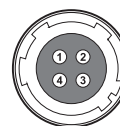
Connector Specification

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

