

VP-61MC-M/C 13 H

61MP Thermoelectric Peltier Cooled Camera



The VP-61MC 13 H, the latest model of the industrial proven VP series, is a new 61 megapixel CMOS camera available with the Camera Link interface. This camera is based on the latest CMOS image sensor technology (IMX455) from Sony Semiconductor Solutions Corporation. The VP-61MC 13 H offers up to 13 frames per seconds at 9568 × 6380 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 degrees below ambient temperature. The VP-61MC 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.

VIEWWORKS

vision.viewworks.com

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Main Features

- Thermoelectric Peltier Cooled – 15°C below
- 61 Megapixel Resolution
- Camera Link Full Interface
- 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

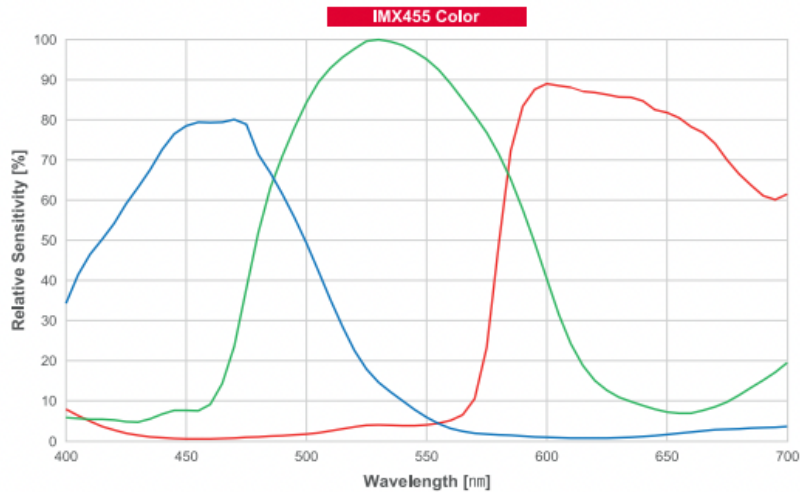
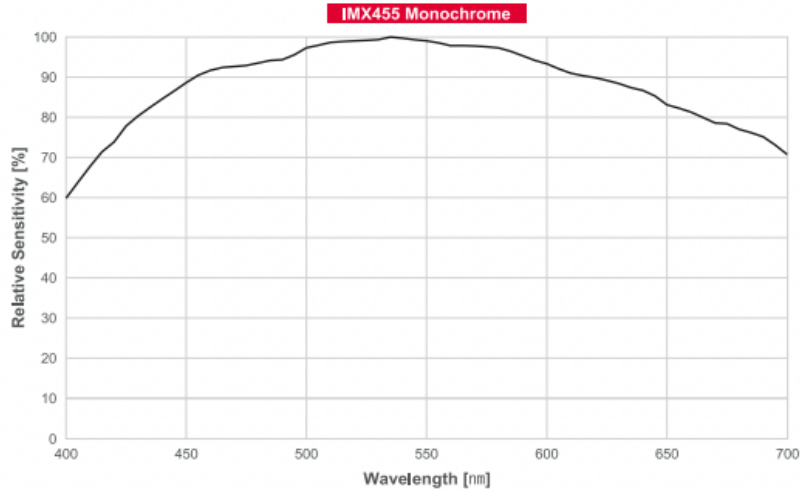
Specifications

Model	VP-61MC-M/C 13 H	
Resolution (H × V)	9568 × 6380	
Sensor	SONY IMX455	
Max. Image Circle	Diagonal 43.3 mm (Type 2.7)	
Pixel Size	3.76 μm × 3.76 μm	
Interface	Camera Link Base / Medium / Full / 10 Tap, 26-pin SDR Connector	
Max. Frame Rate	2 Tap	2.75 fps
	4 Tap	5.50 fps
	8 Tap	10.97 fps
	10 Tap	13.68 fps
Exposure Time (2-Line step)	22.72 μs – 60 s (@ 10 Tap)	
Partial Scan (Max. Speed)	1569.85 fps at 4 Lines	
Binning	Sensor	×1, ×2, ×3 (Horizontal and Vertical Dependent)
	Logic	×1, ×2, ×4 (Horizontal and Vertical Independent)
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	Rolling Shutter	
Trigger Synchronization	Overlapped	Free-Run
	Non-overlapped	Hardware Trigger, Software Trigger, CC1 or User Output0
External Trigger	3.3 V ~ 24.0 V, 10 mA, Logical Level Input, Optically Isolated	
Dynamic Range	78 dB	
Gain Control	Analog: 1× ~ 32× / Digital: 1× ~ 32×	
Black Level Control	0 ~ 255 LSB at 12 bit	
Cooling Method	Thermoelectric Peltier Cooling	
Cooling Performance	15°C below ambient temperature – Standard cooling with a fan	
Dimension / Weight	80.0 mm × 80.0 mm × 154.6 mm, 1070 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. 28.0 W
Compliance	CE, FCC, KC (in preparation)	
API SDK	Vieworks Imaging Solution 7.X	

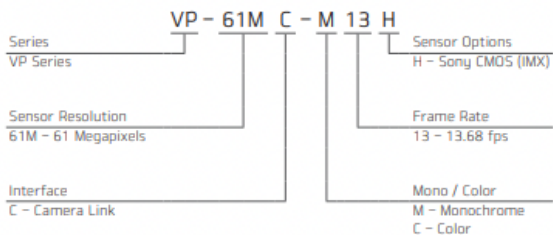
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Relative Sensitivity Curves



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

