

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.

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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

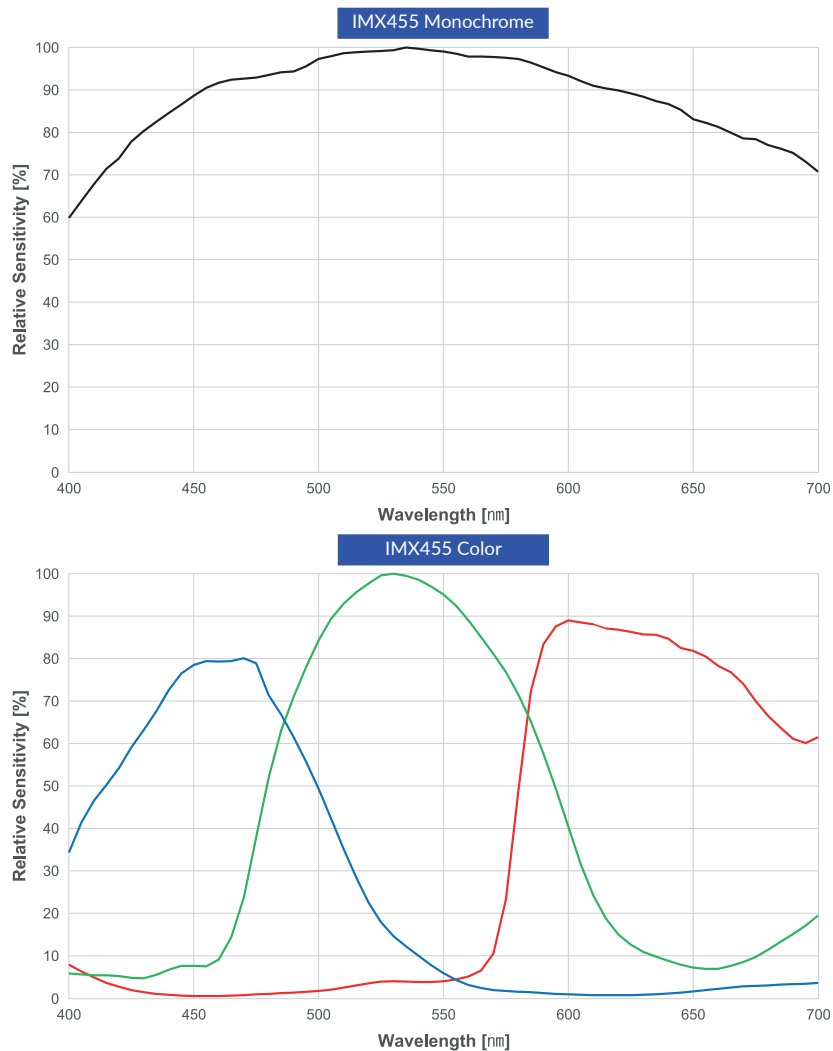
Specifications

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

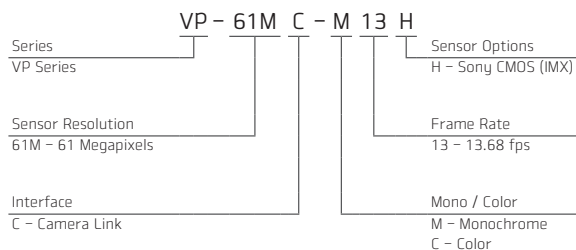
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Relative Sensitivity Curves

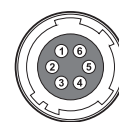


Ordering Scheme



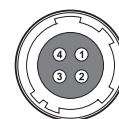
Connector Specification

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

