VC-101MC-M/C 8 H
VC-151MC-M/C 5 H

Ultra High Resolution CMOS Digital Camera

The VC-101MC and VC-151MC, the latest models of the industrial proven VC series, are 101 and 151 megapixel resolution CMOS cameras available with the Camera Link interface. These cameras are based on the latest CMOS image sensor technology (IMX461 and IMX411) from Sony Semiconductor Solutions Corporation. The VC-101MC-8 offers up to 8.1 frames per second at 11648 × 8742 resolution. For even higher resolution applications, the VC-151MC-5 offers up to 5.5 frames per second at 14192 × 10640 resolution. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC-101MC and VC-151MC cameras offer not only highly uniformed images but also high speed image processing capabilities. Featured with high quality image uniformity and high resolution, these cameras are ideal for demanding applications such as FPD, PCB and semiconductor inspections.

VC-101MC-8 H / VC-151MC-5 H

Ultra High Resolution CMOS Digital Camera

Main Features

- 101 or 151 Megapixel Resolution
- Camera Link Full Interface
- Electronic Rolling Shutter
- DSNU and PRNU Correction
- Flat Field Correction with Sequencer Control
- Hot Pixel Correction
- Dynamic Defective Pixel Correction
- 4 Gb Frame Buffer for Burst Readout Mode

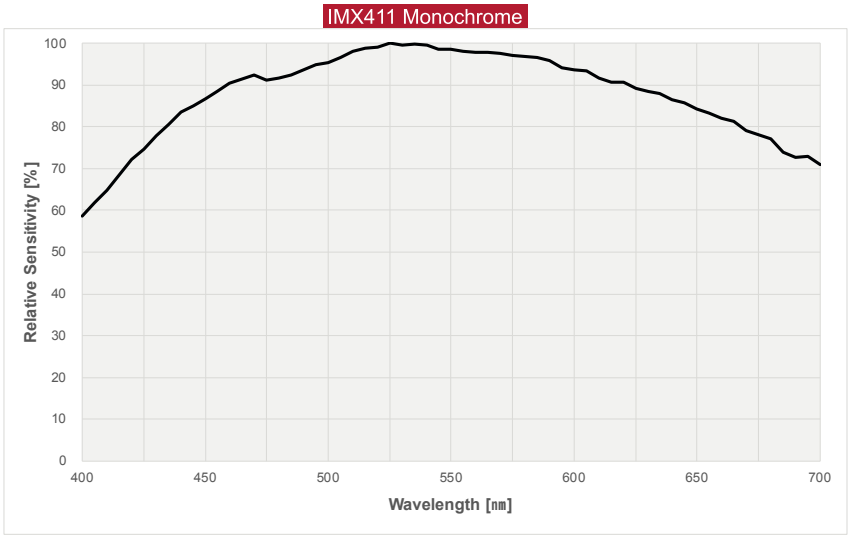
Applications

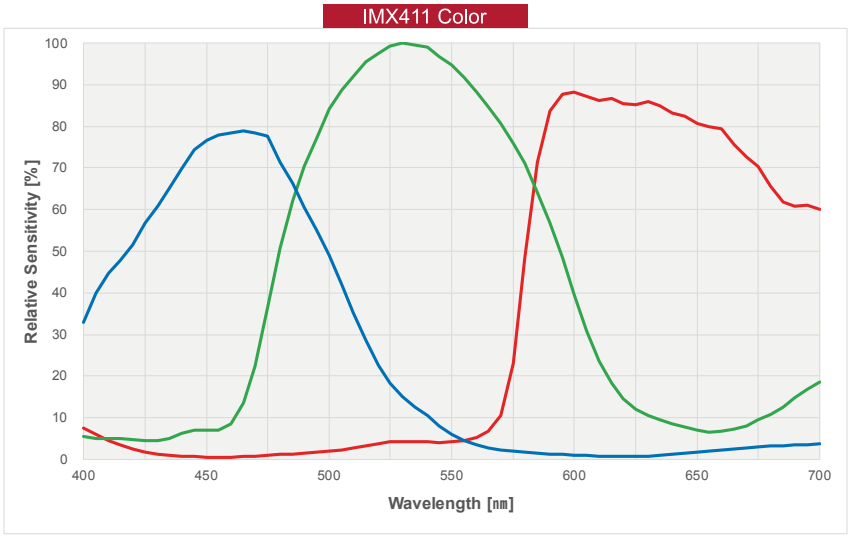
- Flat Panel Display Inspection
- Electronics Inspection
- Semiconductor Inspection
- Document / Film Scanning

Specifications

Model		VC-101MC-M/C 8 H	VC-151MC-M/C 5 H
Resolution (H × V)		11648 × 8742	14192 × 10640
Sensor		SONY IMX461	SONY IMX411
Sensor Size (Diagonal)		43.80 mm × 32.87 mm (55 mm)	53.36 mm × 40.01 mm (66.7 mm)
Pixel Size		3.76 µm × 3.76 µm	3.76 µm × 3.76 µm
Interface		Camera Link Base / Medium / Full / 10 Tap	
Max. Frame Rate		8.1 fps (with Overlapped Acquisition)	5.5 fps (with Overlapped Acquisition)
Camera Image Memory		4 Gb	
Exposure Time (1 µs step)		1 µs – 60 s	
Pixel Data Format		8 / 10 / 12 bit	
Data Output Pixel Clock Speed		85 MHz / 65 MHz	
Electronic Shutter		Rolling Shutter	
Trigger Synchronization	Overlapped Acquisition	Free-Run	
	Non-overlapped Acquisition	Hardware Trigger or CC1	
Dynamic Range		78 dB	
Gain Control		1× ~ 32×	
Black Level Control		0 ~ 255 LSB at 12 bit	
Dimension / Weight		90 mm × 90 mm × 92.5 mm, 800 g (with M-72 mount)	100 mm × 100 mm × 92.5 mm, 1070 g (with M-72 mount)
Temperature		Operating: 0°C ~ 40°C, Storage: -40°C ~ 70°C	
Lens Mount		M72-mount, Custom mount available upon request	
Power	External	11 ~ 24 V DC	
	Dissipation	Typ. 15.5 W	
Compliance		CE, FCC, KC	
API SDK		Vieworks Imaging Solution 7.X	

Relative Sensitivity Curves





Ordering Scheme

VC – 151M C – M 5 H

- Series: VC Series
- Sensor Resolution: 101M – 101 Megapixels; 151M – 151 Megapixels
- Interface: C – Camera Link
- Mono / Color: M – Monochrome; C – Color
- Frame Rate: 5 – 5.5 fps; 8 – 8.1 fps
- Sensor Options: H – Sony CMOS (IMX)

Connector Specification

Power

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

Control

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

Connectors on camera body

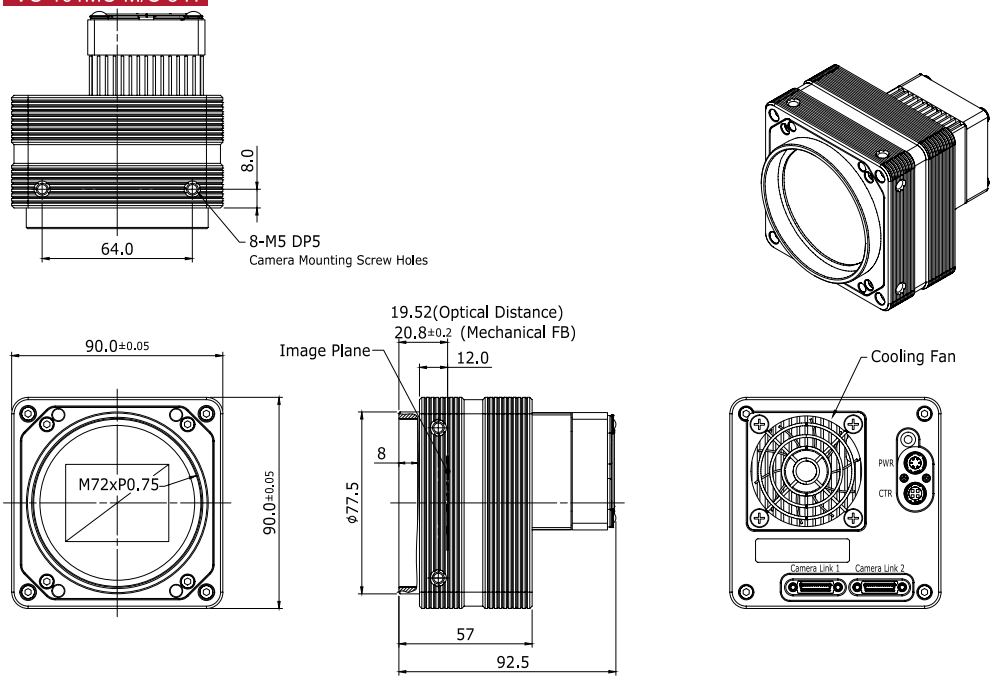
VC-101MC-8 H / VC-151MC-5 H

Ultra High Resolution CMOS Digital Camera

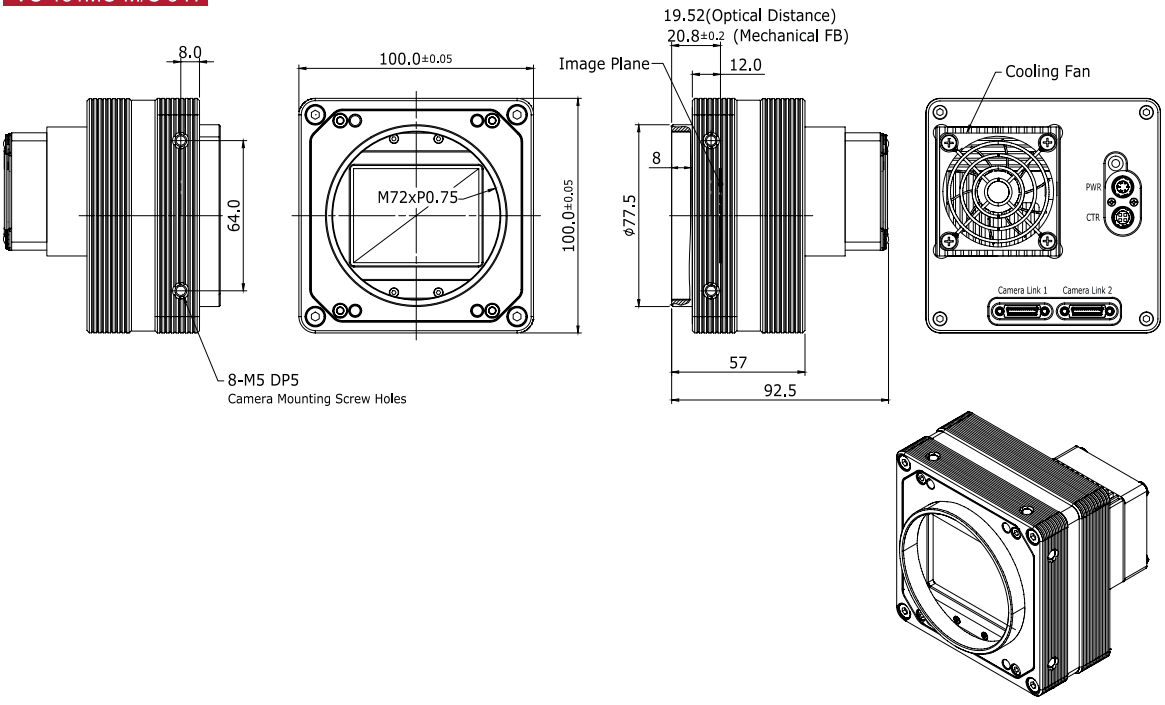
Mechanical Dimensions

Unit: mm

VC-101MC-M/C 8 H



VC-151MC-M/C 5 H



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