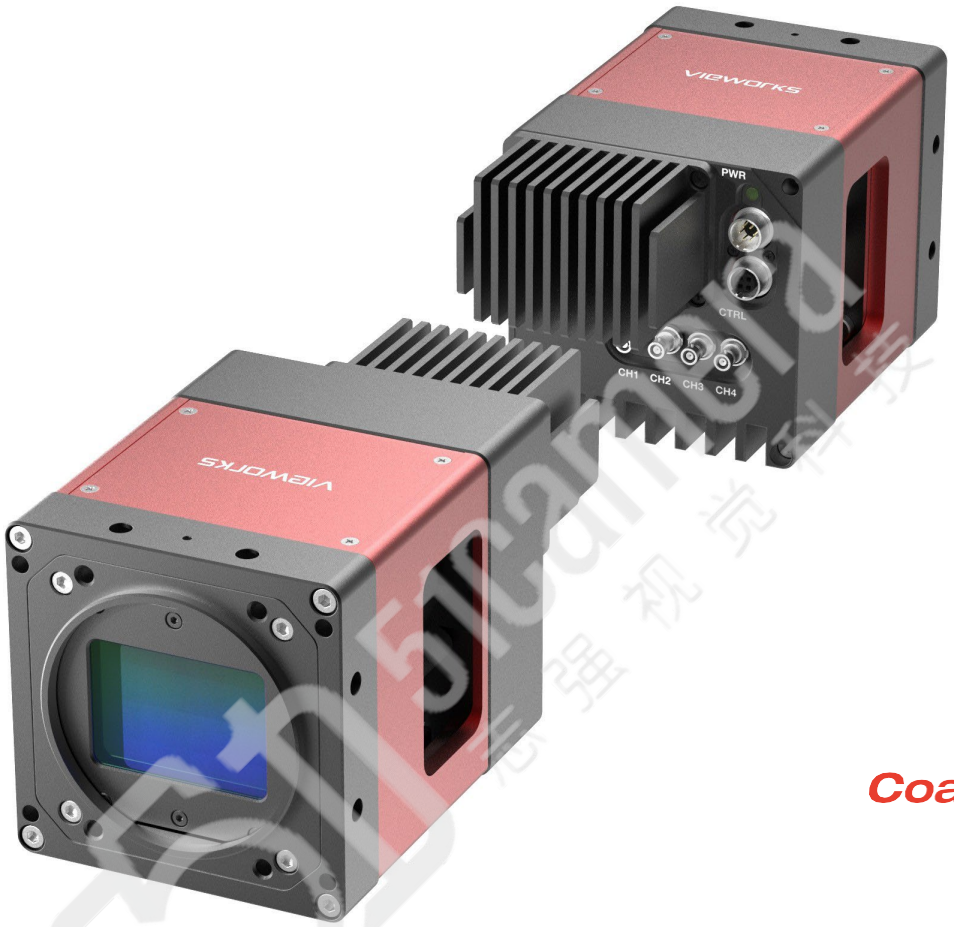
VP-51MX2-M/C30100

51-Megapixel Thermoelectric Peltier Cooled Camera with COaXPress 2.0 Interface

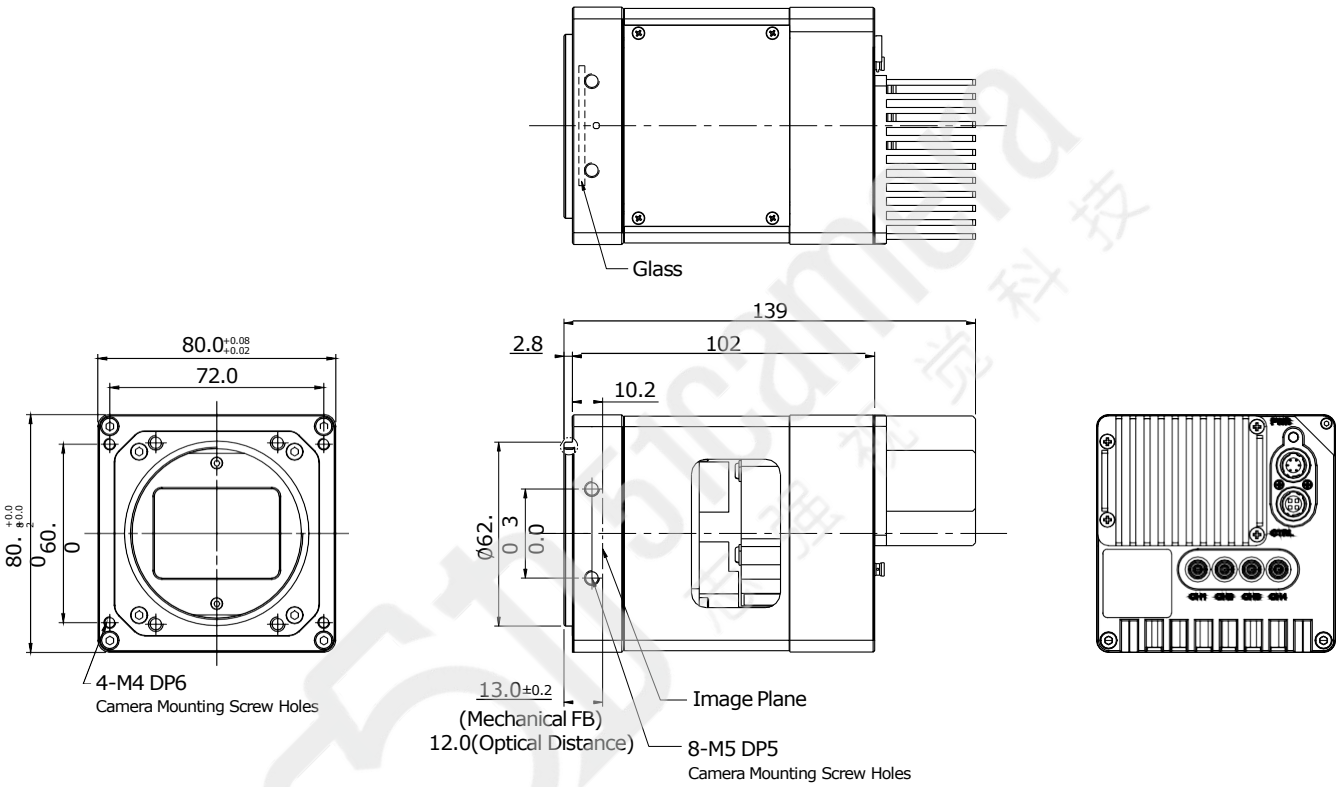


CoaXPress®

The VP-51MX2-M/C30100 is a new 51-megapixel CoaXPress camera based on GMAX4651, the latest CMOS image sensor technology, from Gpixel. It offers up to 30 frames per second at 8,416 × 6,032 resolution. The Thermoelectric Peltier Cooling (TEC) technology, featured in this camera, is designed for use in various medical fields and maintains the image sensor's operating temperature at up to 15° C below ambient temperautre. It provides a stable operating capability and high resolution that are ideal for demanding applications such as FPD, PCB, and semiconductor inspections.

Mechanical Dimensions

Unit: mm



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VP-51MX2-M/C30100

Ultra High Resolution CMOS Digital Camera

Main Features

- Termoelectric Peltier Cooled – 15℃ below
- 51-Megapixel Resolution
- CoaXPress 2.0 Interface up to 30 fps at 50 Gbps using 4 Channels
- Global Shutter CMOS Technology
- DSNU and PRNU Correction
- Flat Field Correction
- Defective Pixel Correction

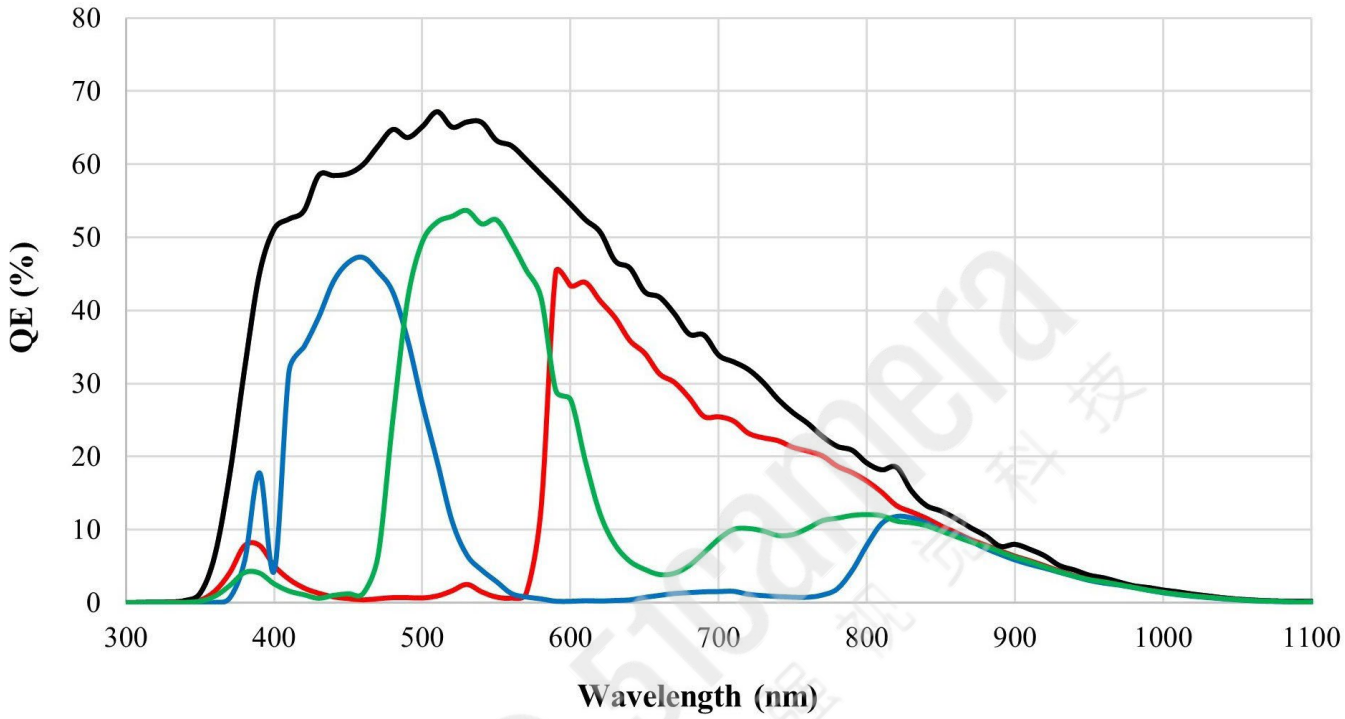
Applications

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

Specifications

Model		VP-51MX2-M/C30100
Resolution (H × V)		8,416 x 6,032
Sensor		GMAX4651
Sensor Size (Diagonal)		38.8 ㎜ × 27.8 ㎜ (47.63 ㎜)
Pixel Size		4.6 ㎛ × 4.6 ㎛
Interface		CoaXPress 2.0 (CXP-6/10/12)
Max. Frame Rate (8 bit)		30.3 fps
Exposure Time (1 ㎲ step)		1 ㎲ to 20 s
Binning		Horizontal and Vertical Independent: ×1, ×2, and ×4(Mono Only)
Pixel Data Format	Monochrome	8/10/12 bit
	Color	RG Bayer 8/10/12 bit
Electronic Shutter		Global Shutter
Exposure Mode		Timed, Trigger Width
Dynamic Range		65 dB at 12 bit
Gain Control	Analog	×3.5 to ×5
	Digital	×1 to ×32
Black Level Control		0 to 256 LSB at 12 bit
Dimension / Weight		80 mm × 80 mm × 139 mm, 1.08kg
Temperature		Operating: 0℃ to 40℃, Storage: -40℃ to 70℃
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger, and CXP
External Trigger		3.3 V to 24.0 V, 10 ㎃, Logical Level Input, Optically Isolated
Software Trigger		Asynchronous, Programmable via Camera API
Lens Mount		M58 mount, F-mount adapter, or custom mount available upon request
Power	External	11 to 24 V DC
	Dissipation	Typ.23 W
	PoCXP	24 V DC, Minimum 2 of PoCXP cables required
Compliance		CE, FCC, KC
API SDK		Vieworks Imaging Solution 7.X

Spectral Response



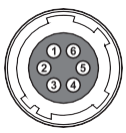
Ordering Scheme

VP – 51M X2 – M 30 I

Series VP Series			Sensor Options I – Gpixel CMOS
Sensor Resolution 51 Megapixels			Frame Rate 30 – 30 fps
Interface X2 – CoaXPress 2.0			Mono / Color M – Monochrome C – Color

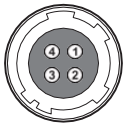
Connector Specification

Power



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

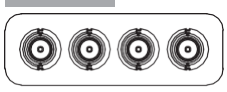
Control



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

Data Transfer / Communications

Micro-BNC



CH1: Master Connection
75 Ω , Micro-BNC (HD-BNC)

Connectors on camera body