

Preliminary

VC-21MHF-M/C570I

The Fastest Speed & High Resolution CMOS Digital Camera
with 100G CoaXPress-over-Fiber Interface



CoaXPress®
over-Fiber

The VC-21MHF-M/C570I camera is Vieworks' first camera with the CoF(CoaXPress over Fiber) interface that offers 567 frames per second at $5,120 \times 4,096$ resolution. This new interface supports transmitting image data at up to 100 Gbps. Equipped with the Vieworks' innovative technology, this camera delivers not only exceptional frame rates but also greater flexibility through support for extended cable lengths. Combining high speed with high performance, the VC-21MHF-M/C570I camera is an excellent choice for demanding applications requiring high speed and resolutions, such as FPD, PCB and semiconductor inspections.

To meet various application requirements, Vieworks offers two versions of the camera: a fan type and a heat sink type, both with identical specifications..

VIEWORKS

vision.vieworks.com

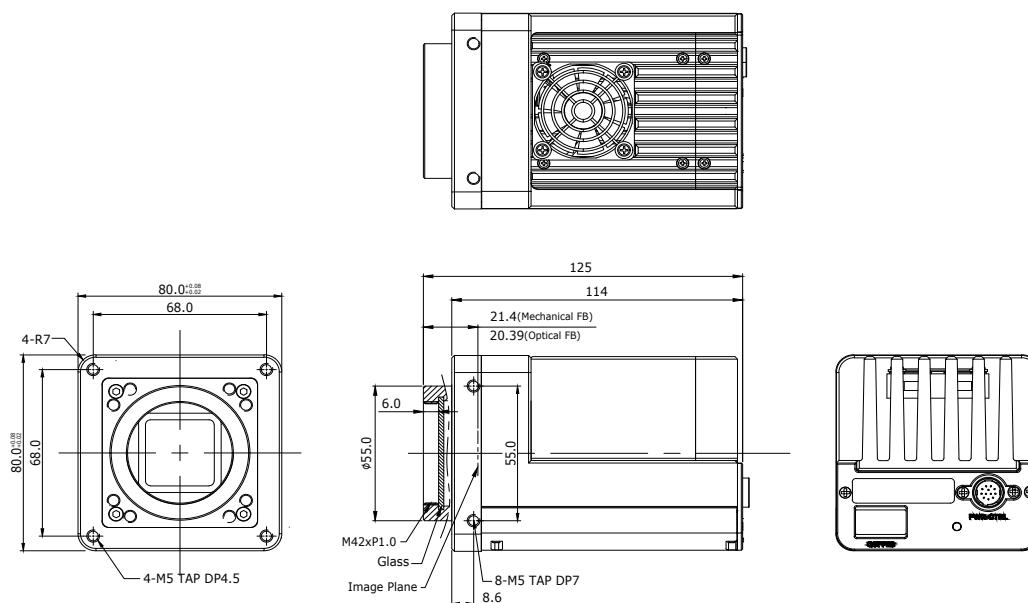
The Fastest Speed & High Resolution CMOS Digital Camera with 100G CoF Interface



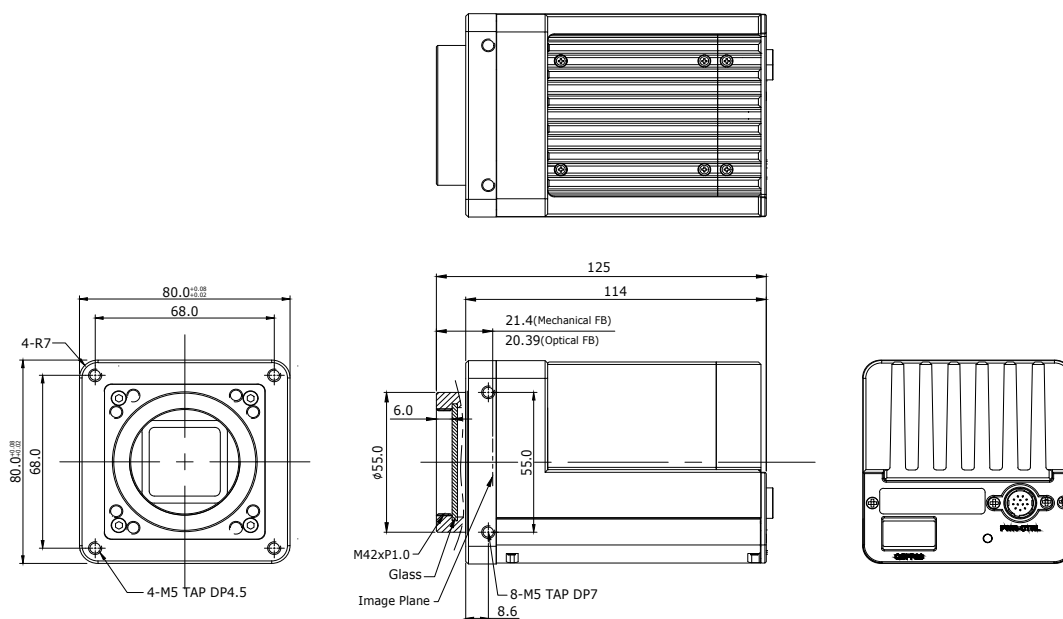
Mechanical Dimensions

VC-21MHF-M/C570I

Unit: mm



VC-21MHF-M/C570I-HS



VC-21MHF-M/C570I

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Main Features

- High Speed 21 Megapixel CMOS Image Sensor
- CoaXPRESS over Fiber Interface up to 100 Gbps using 1 Link
- Global Shutter CMOS Technology
- DSNU and PRNU Correction
- Flat Field Correction
- Defective Pixel Correction
- GenICam Compatible – XML based Control

Applications

- FPD and Electronics Inspection
- Semiconductor Inspection
- Research and Scientific Imaging
- Document / Film Scanning

Specifications

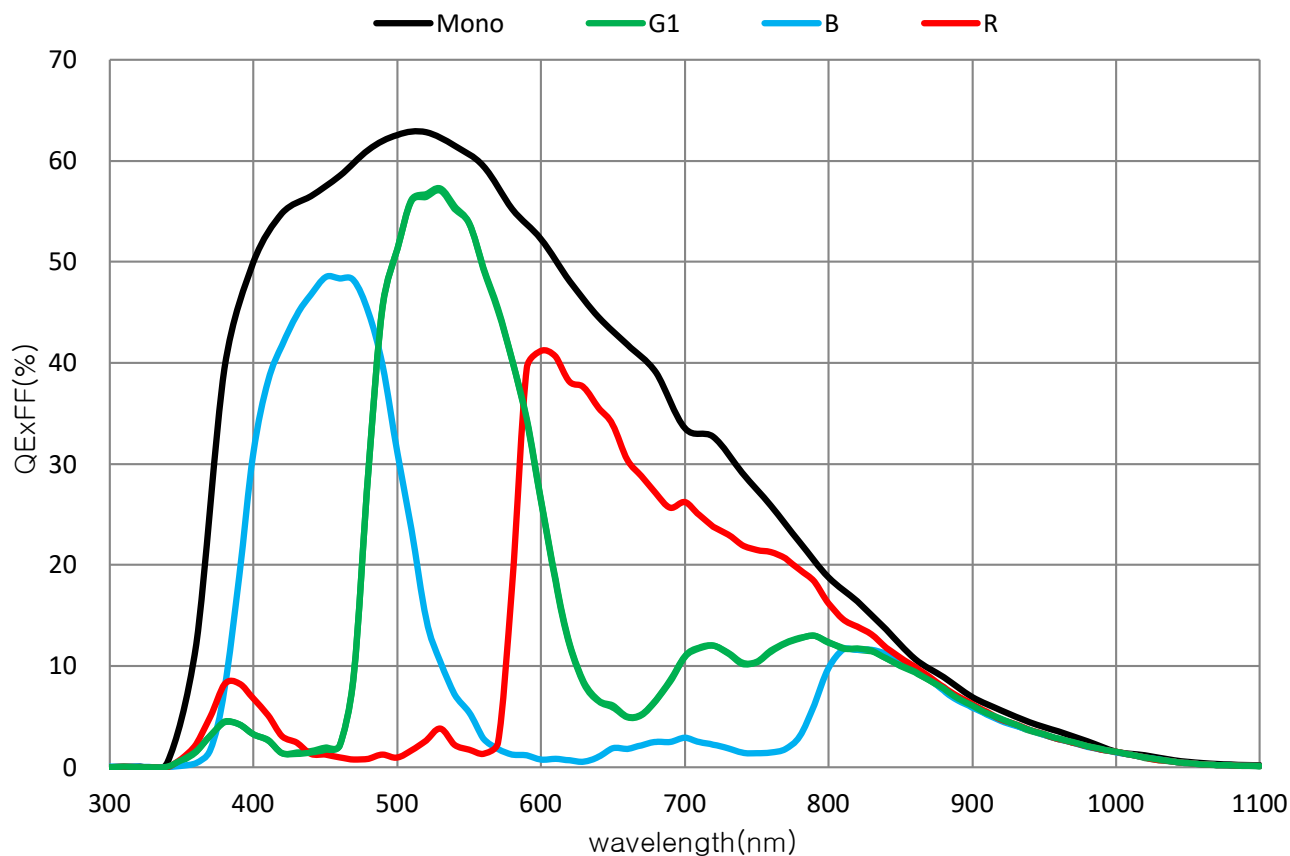
Model		VC-21MHF-M/C570I	VC-21MHF-M/C570I-HS
Resolution (H × V)		5,120 × 4,096	
Sensor		Gpixel GSPRINT 4521	
Optical Format (Diagonal)		23.04 × 18.43 mm (29.5mm)	
Sensor Type		High Speed CMOS Image Sensor	
Pixel Size		4.5 × 4.5 μm	
Interface		CoaXPRESS over Fiber	
Optical Transceiver		100G QSFP28 SR4, LR4	
Max. Frame Rate		567 fps at 8 bit	
Exposure Time		4 μs to 85 s	
Pixel Data Format	Mono	Mono 8 /10 / 12 bit	
	Color	GB Bayer 8 / 10 / 12 bit	
Electronic Shutter		Global Shutter	
Gain Control	Analog	X1.0, X1.3, X2.0, and X4.2	
	Digital	X1 to X32	
Black Level Control		0 to 255 LSB at 12 bit	
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger or CXP	
External Trigger		3.3 V to 24.0 V, 10 mA, Logical Level Input, Optically Isolated	
Software Trigger		Asynchronous, Programmable via Camera API	
Dynamic Range		Typ. 66 dB at 12 bit	
Dimension(WxHxD) / Weight		80.0 × 80.0 × 125.0 mm / 1,230 g	80.0 × 80.0 × 125.0 mm / 1,250 g
Temperature		Operating: 0 °C to 40 °C, Storage: -40 °C to 70 °C	
Lens Mount		F-mount, Custom mount available upon request	
Power	External	11 to 24 VDC	
	Dissipation	Typ. 26 W	
Compliance		CE, FCC, and KC	

VC-21MHF-M/C570I

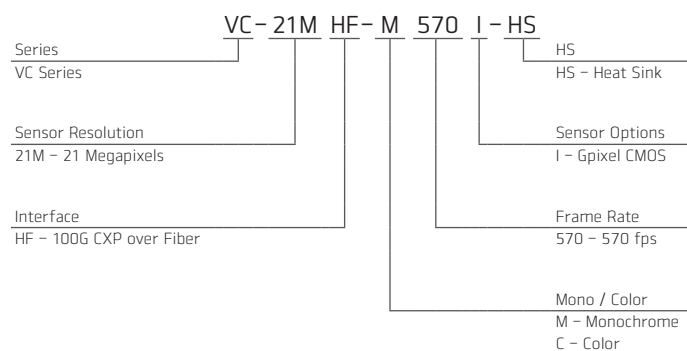
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Spectral Response



Ordering Scheme



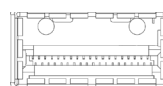
Connector Specification

Power / Control



- | | |
|-----------------|------------------|
| 1: DC Ground | 2: +12 VDC |
| 3: I/O Output- | 4: I/O Output1+ |
| 5: Trigger IN- | 6: Trigger IN+ |
| 7: I/O Output2+ | 8: I/O Output3+ |
| 9: I/O Output4+ | 10: I/O Output5+ |
| 11: +12 VDC | 12: DC Ground |
- (HR10A-10R-12PB)

Data Transfer / Communications



CH1

CH1: Master Connection / QSFP28

Connectors on camera body