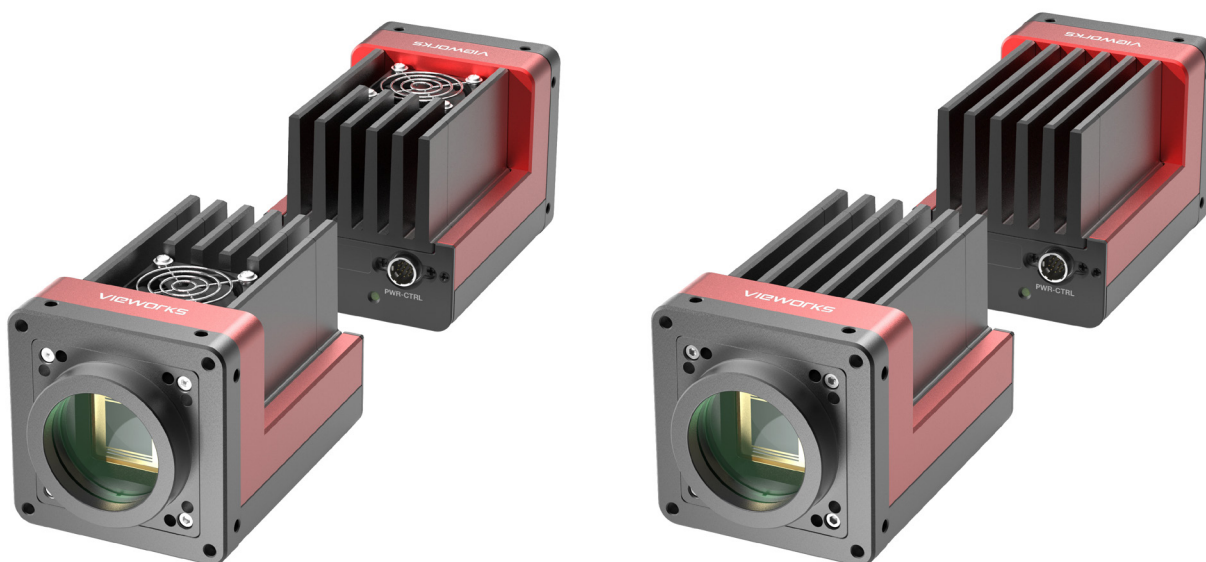


VCS-14MHF-M/C670 I

The Fastest Speed CMOS Digital Camera
with Back-side Illuminated Sensor



CoaXPress®
over-Fiber

The VCS-14MHF-M/C670I camera is Viewworks' first camera with the CoF(CoaXPress over Fiber) interface that offers 670 frames per second at 4,608 X 3,072 resolution. This new interface supports transmitting image data at up to 100 Gbps. Equipped with the Viewworks' 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 VCS-14MHF-M/C670I camera is an excellent choice for demanding applications requiring high speed and resolution, including FPD, PCB and semiconductor inspections.

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

VIEWWORKS

vision.viewworks.com

VCS-14MHF-M/C670I

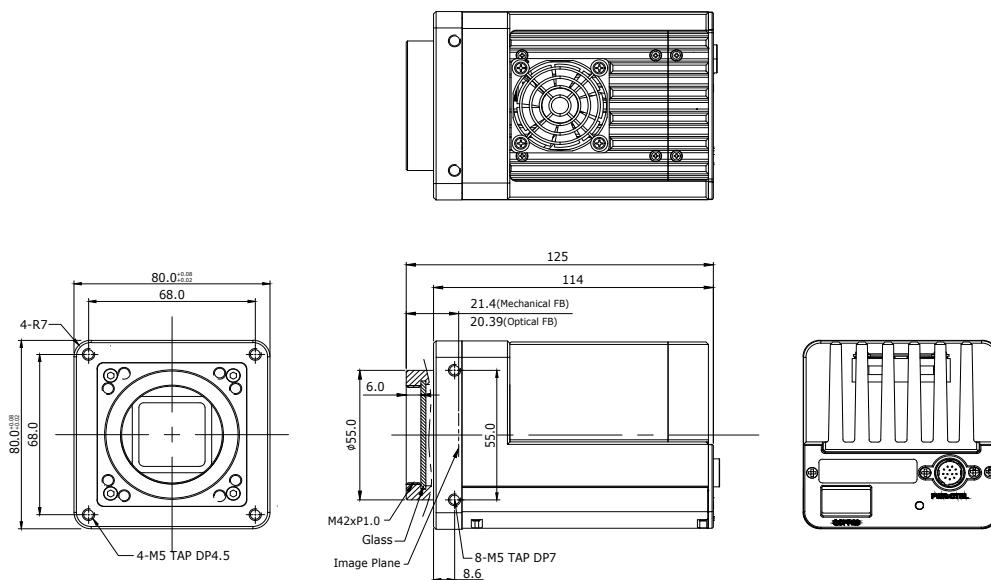
The Fastest Speed & High Resolution CMOS Digital Camera with CoF Interface

CoaxPress[®]
over-Fiber

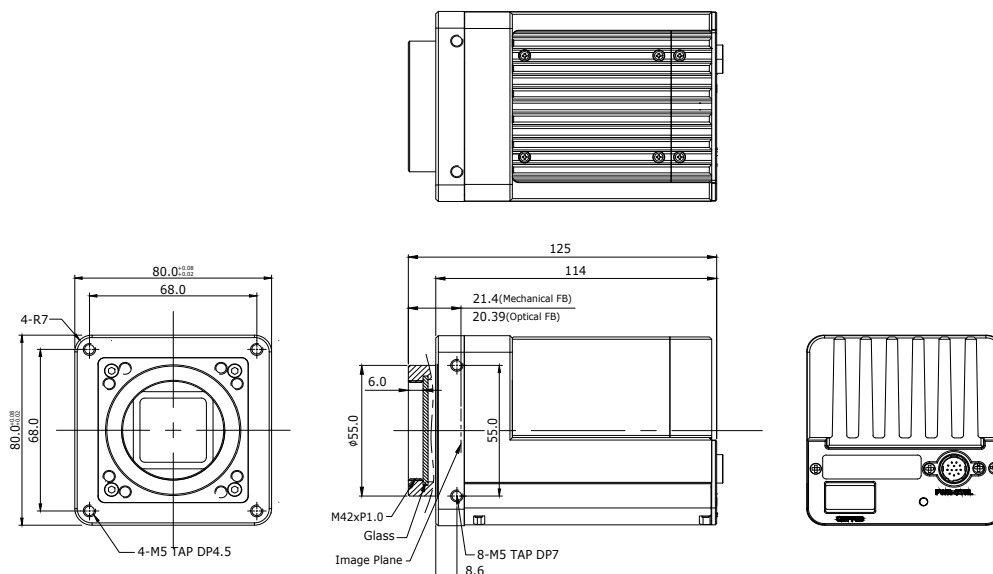
Mechanical Dimensions

Unit: mm

VCS-14MHF-M/C670I



VCS-14MHF-M/C670I-HS



VCS-14MHF-M/C670I

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



Main Features

- High Speed 14 Megapixel CMOS Image Sensor
- BSI (Backside Illuminated) 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
- Low-gain and High-gain Composite Image

Applications

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

Specifications

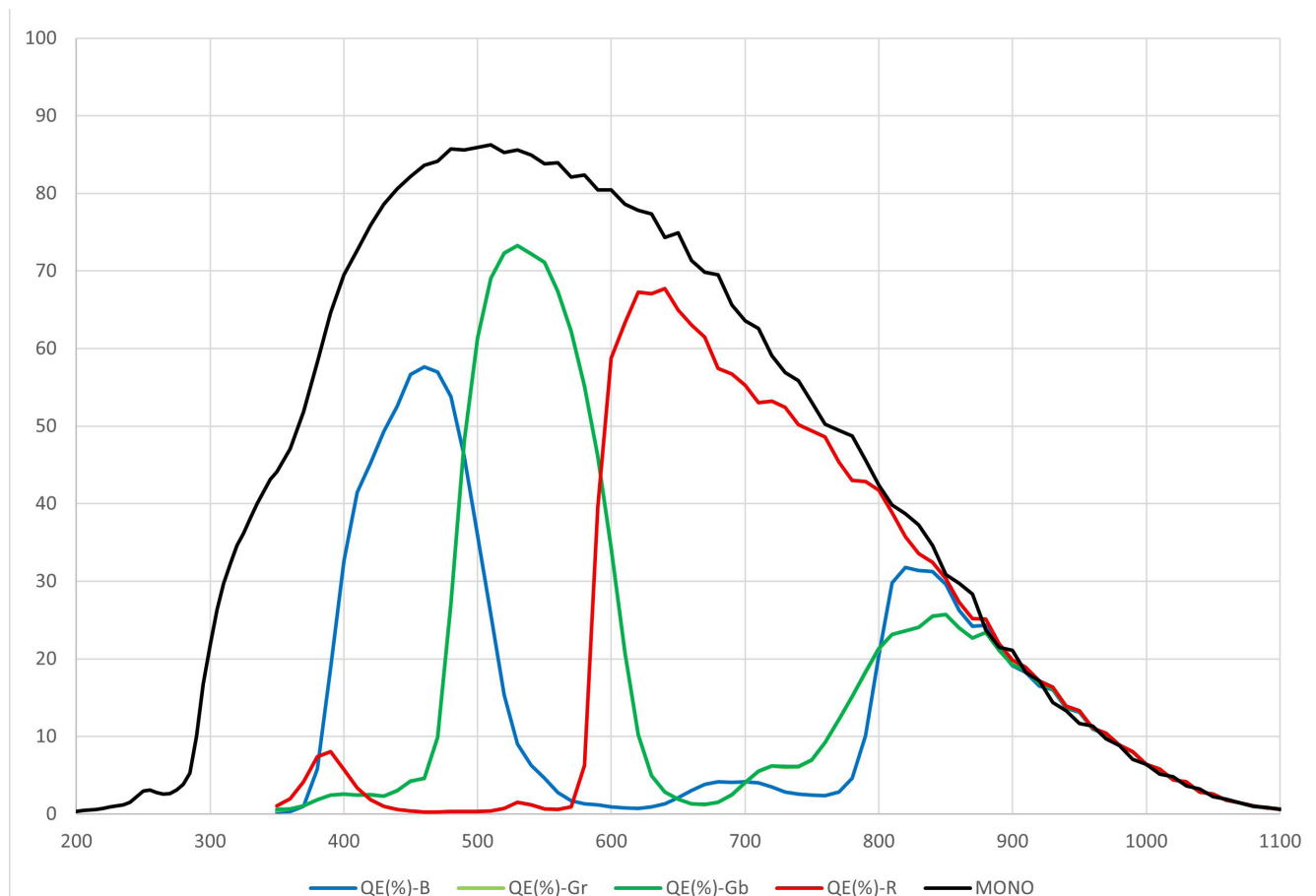
Model		VCS-14MHF-M/C670I10	VCS-14MHF-M/C670I10-HS
Resolution (H × V)		4,608 × 3,072	
Sensor		Gpixel GSPRINT 5514	
Optical Format (Diagonal)		25.34 × 16.90 mm (30.5 mm)	
Sensor Type		High Speed CMOS Image Sensor	
Pixel Size		5.5 × 5.5 μm	
Interface		CoaXPRESS over Fiber	
Optical Transceiver		100G QSFP28 SR4	
Max. Frame Rate		670 fps at 10 bit	
Exposure Time		2 μs to 85 s (1 μs step)	
Pixel Data Format	Mono	Mono 8/10/12 bit	
	Color	GR Bayer 8/10/12 bit	
Electronic Shutter		Global Shutter	
Gain Control	Analog	12-bit: x1, x1.55, x2.17, x2.77, and x5.0 10-bit: x1, x1.67, x2.14, x2.93, and x4.4	
	Digital	×1 to ×32	
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		M42 mount, Custom mount available upon request	
Power	External	11 to 24 V DC	
	Dissipation	Typ. 26 W	
Compliance		CE, FCC, and KC	

VCS-14MHF-M/C670I

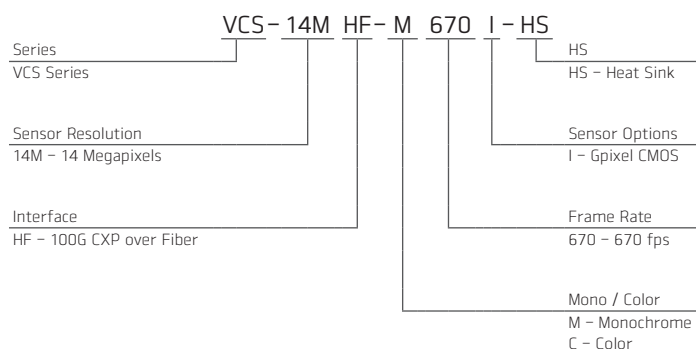
The Fastest Speed & High Resolution CMOS Digital Camera with CoF Interface



Spectral Response



Ordering Scheme



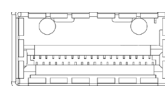
Connector Specification

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