# VC-21MX2-M/C 230 I

The Fastest Speed & High Resolution CMOS Digital Camera with CoaXPress 2.0 Interface



The VC-21MX2-M/C 230 I camera is Vieworks' first camera with the CoaXPress 2.0 interface that offers 230 frames per second at  $5120 \times 4096$  resolution. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, this camera offers not only fast frame rates but also highly uniformed images.

Its CoaXPress 2.0 interface supports transmitting image data at up to 50 Gbps using four coaxial cables. Featured with high speed and high performance, the VC-21MX2-M/C 230 I camera is an excellent choice for applications that require high data rates and resolutions, such as FPD, PCB and semiconductor inspections.





#### **Main Features**

- High Speed 21 Megapixel CMOS Image Sensor
- CoaXPress 2.0 Interface up to 230 fps at 50 Gbps using 4 CH
- Global Shutter CMOS Technology
- DSNU and PRNU Correction
- Flat Field Correction
- Defective Pixel Correction
- GenlCam Compatible XML based Control

### **Applications**

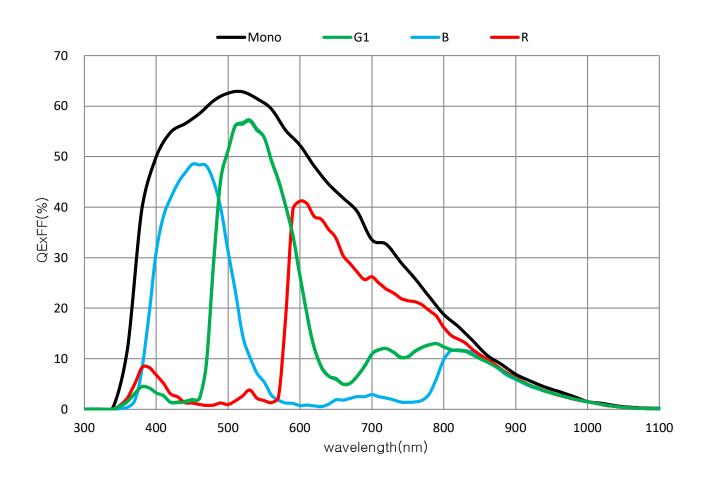
- FPD and Electronics Inspection
- Semiconductor Inspection
- Research and Scientific Imaging
- Document / Film Scanning

# **Specifications**

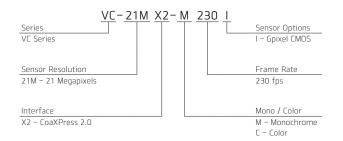
Model		VC-21MX2-M/C 230 I
Resolution (H $ imes$ V)		5,120 × 4,096
Sensor		GSPRINT 4521
Optical Format (Diagonal)		23.04 mm $ imes$ 18.43 mm (29.5 mm)
Sensor Type		High Speed CMOS Image Sensor
Pixel Size		4.5 $\mu$ m $ imes$ 4.5 $\mu$ m
Interface		CoaXPress 2.0 (CXP-12)
Max. Frame Rate (8 bit)	CXP-12 × 1	56 fps
	CXP-12 × 2	114 fps
	CXP-12 × 4	229 fps
Exposure Time		4 μs - 60 s
Partial Scan (Max. Speed)		10011.7 fps at 32 Lines
Pixel Data Format	Mono	Mono 8/10/12 bit
	Color	GB Bayer 8/10/12 bit
Electronic Shutter		Global Shutter
Gain Control	Analog	1.3×, 2.0×, 4.2×
	Digital	1× ~ 32×
Black Level Control		0 - 255 LSB at12 bit
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger or CXP
External Trigger		3.3 V ~ 24.0 V, 10 mA, Logical Level Input, Optically Isolated
Software Trigger		Asynchronous, Programmable via Camera API
Dynamic Range		Typ. 67.8 dB at 12 bit
Dimension / Weight		80 mm $\times$ 80 mm $\times$ 104.5 mm, 750 g (F-mount)
Temperature		Operating: 0°C ~ 40°C, Storage: −40°C ~ 70°C
Lens Mount		F-mount, Custom mount available upon request
Power	External	12 ~ 24 V DC
	Dissipation	Typ. 24 W
	PoCXP	24 V DC, Minimum of two PoCXP cables required
Compliance		CE, FCC, KC



#### **Spectral Response**



# **Ordering Scheme**



# **Connector Specification**

#### Power / Control



1: DC Ground 2: +12V DC 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: I/O Output6+ 12: Not Connected (HR10A-10R-12PB)

#### Data Transfer / Communications

CH1 CH2 CH3 CH4

CH1: Master Connection Micro-BNC (HD-BNC)

Connectors on camera body



#### **Mechanical Dimensions**

Unit: mm

