VC-25MX2-M/C 150 I

25 Megapixel High Speed CMOS Digital Camera with CoaXPress 2.0 Interface



The VC-25MX2-M/C 150 I, the latest model of the industrial proven VC series, is a new 25-megapixel CoaXPress camera and based on the CMOS global shutter image sensor technology (GMAX0505) from Gpixel. The VC-25MX2-150 I camera offers up to 150.2 frames per second at $5,120 \times 5,120$ resolution. The camera comes with the next generation CoaXPress 2.0 (CXP-12) interface delivering up to 50 Gigabits per second over four coaxial cables. These combinations of the CMOS sensor technology and CoaXPress 2.0 interface set a new standard for industrial, scientific and surveillance digital imaging applications. Customers in the industrial market can take advantage of simple coax cabling to transmit images at rates and distance above and beyond previous standards. This high-speed and high-resolution camera is ideal for wide range of demanding applications such as FPD, PCB and semiconductor inspections.





Main Features

- High Speed 25 Megapixel CMOS Image Sensor
- CoaXPress 2.0 Interface up to 150.2 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

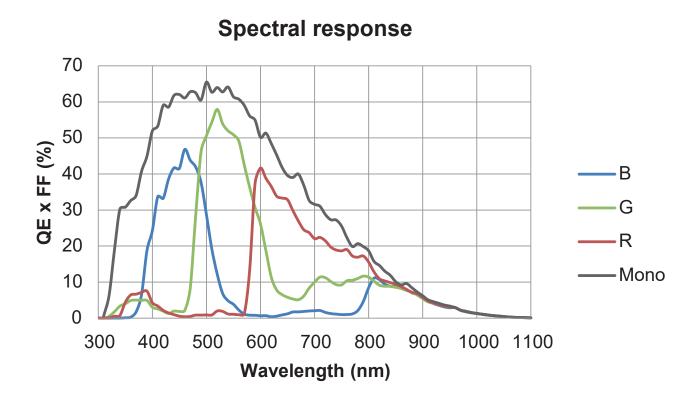
- Flat Panel Display Inspection
- Electronics Inspection
- Semiconductor Inspection
- Document / Film Scanning

Specifications

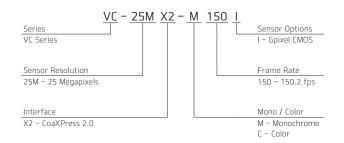
Model		VC-25MX2-M/C 150 I
Resolution (H $ imes$ V)		5,120 × 5,120
Sensor		Gpixel GMAX0505
Sensor Size (Diagonal)		12.8 mm ×12.8 mm (18.1 mm)
Sensor Type		High Speed CMOS Image Sensor
Pixel Size		2.5 μ m $ imes$ 2.5 μ m
Interface		CXP-12 × 4
Max. Frame Rate	CXP-6 × 4	93.1 fps
	CXP-10 × 4	145.6 fps
	CXP-12 × 4	150.2 fps
Exposure Time (1 μs step)		1 μs - 60 s
Partial Scan (Max. Speed)		9022 fps at 4 Lines
Pixel Data Format	Mono	Mono 8 / Mono 10
	Color	GB Bayer 8 / GB Bayer 10
Electronic Shutter		Global Shutter
Gain Control		1× ~ 32×
Black Level Control		0 - 63 LSB at 10 bit
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger or CXP
External Trigger		3.3 V ~ 24.0 V Logical Level Input, Optically Isolated
Software Trigger		Asynchronous, Programmable via Camera API
Dynamic Range		61 dB
Dimension / Weight		80.0 mm $ imes$ 80.0 mm $ imes$ 69.4 mm, 560 g (C-mount)
Temperature		Operating: 0°C ~ 40°C, Storage: −40°C ~ 70°C
Lens Mount		C-mount, Custom mount available upon request
Power	External	11 ~ 24 V DC
	Dissipation	Typ. 14.0 W
	PoCXP	24 V DC, Minimum of two PoCXP cables required
Compliance		CE, FCC, KC (in preparation)
API SDK		Vieworks Imaging Solution 7.X



Spectral Response



Ordering Scheme



Connector Specification

Power

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

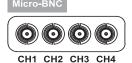
Control



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

2: Trigger IN-

Data Transfer / Communications



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



Mechanical Dimensions

Unit: mm

