# VC-65MX-M/C 35 I VC-65MX-M/C 31 I

# 65 Megapixel High Speed CMOS Digital Camera



The VC-65MX-31 I and VC-65MX-35 I, the latest models of the industrial proven VC series, are new 65 megapixel CoaXPress cameras and based on the latest CMOS image sensor technology (GMAX3265) from Gpixel. The VC-65MX-31 I offers up to 31.6 frames per second at 9344 × 7000 resolution. For high speed applications, the VC-65MX-35 I offers up to 35.5 frames per second at 9344 × 7000 resolution. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC-65MX cameras offer not only highly uniformed images but also high speed image processing capabilities. Featured with high quality image uniformity and high resolution, these cameras are ideal for demanding applications such as FPD, PCB and semiconductor inspections.



65 Megapixel High Speed CMOS Digital Camera

### **Main Features**

- 65 Megapixel Resolution
- CoaXPress Interface up to 35.5 fps at 25 Gbps using 4 CH
- Global Shutter CMOS Technology
- DSNU and PRNU Correction
- Flat Field Correction
- Defective Pixel Correction
- Hot Pixel Correction
- GenlCam Compatible XML based Control

# Applications

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

Model		VC-65MX-M/C 31 I	VC-65MX-M/C 35 I
Resolution (H $ imes$ V)		9344 × 7000	
Sensor		Gpixel GMAX3265 – Normal Speed	Gpixel GMAX3265 – High Speed
Sensor Size (Diagonal)		29.9 mm $\times$ 22.4 mm (37.4 mm)	
Pixel Size		$3.2 \ \mu m \times 3.2 \ \mu m$	
Interface		CoaXPress	
Max. Frame Rate		4 CH: 31.6 fps @ 8 bit	4 CH: 35.5 fps @ 8 bit
		4 CH: 27.3 fps @ 10 bit	4 CH: 27.5 fps @ 10 bit
		4 CH: 24.1 fps @ 12 bit	N/A @ 12 bit
		4 CH: 31.6 fps @ 8 bit (2×2 Binning)	4 CH: 71.1 fps @ 8 bit (2×2 Binning)
Exposure Time (1 µs step)		14 µs - 60 s	12 µs – 60 s
Partial Scan (Max. Speed)		6349.2 fps at 4 Lines	7142.8 fps at 4 Lines
Binning		2 × 2 Binning	
Pixel Data Format	Mono	Mono 8 / Mono 10 / Mono 12	Mono 8 / Mono 10
	Color	GB Bayer 8 / GB Bayer 10 / GB Bayer 12	GB Bayer 8 / GB Bayer 10
Electronic Shutter		Global Shutter	
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger or CXP	
External Trigger		3.3 V $\sim$ 24.0 V, 10 mA, Logical Level Input, Optically Isolated	
Software Trigger		Asynchronous, Programmable via Camera API	
Dynamic Range		66 dB @ 12 bit	62 dB @ 10 bit
Gain Control		1×~32×	
Black Level Control		0 ~ 255 LSB at 12 bit	0 ~ 63 LSB at 10 bit
Dimension / Weight		80 mm $ imes$ 80 mm $ imes$ 103 mm, 750 g (with F-mount)	
Temperature		Operating: 0°C ~ 40°C, Storage: −40°C ~ 70°C	
Lens Mount		F-mount, Custom mount available upon request	
Power	External	11 ~ 24 V DC	
	Dissipation	Typ. 13.5 W	Typ. 17.5 W
	PoCXP	24 V DC, Minimum of two PoCXP cables required	
Compliance		CE, FCC, KC	
API SDK		Vieworks Imaging Solution 7.X	

## Spectral Response



## **Ordering Scheme**



## **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



CH1: Master Connection 75  $\Omega,$  DIN 1.0/2.3

### **Mechanical Dimensions**

Unit: mm





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