

VC-50MX

50 MEGAPIXEL CMOS DIGITAL CAMERA WITH COAXPRESS INTERFACE



The VC-50MX, the latest member of the industrial proven VC series, is a 50 megapixel resolution CMOS camera with the CoaXPress interface. The VC-50MX uses the latest 50 megapixel CMOS image sensor (CMV50000) technology from AMS CMOSIS, and offers up to 30.9 frames per second at 7920 × 6004 resolution. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC-50MX camera offers not only highly uniform images but also high speed image processing capabilities. Featured with high quality image uniformity and high resolution, this camera is ideal for demanding applications such as FPD, PCB and semiconductor inspections.

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Main Features

- * 50 Megapixel Resolution (AMS CMOSIS)
- * High Speed Progressive Scan CMOS Imager
- * Global Shutter CMOS Technology
- * CoaXPress Interface up to 30 fps at 25 Gbps using 4 CH
- * Pixel Defect Correction
- * Flat Field Correction
- * DSNU and PRNU Correction

Applications

- * Flat Panel Display Inspection
- * PCB Inspection
- * Machine Vision Inspection
- * Microscopy and Metrology

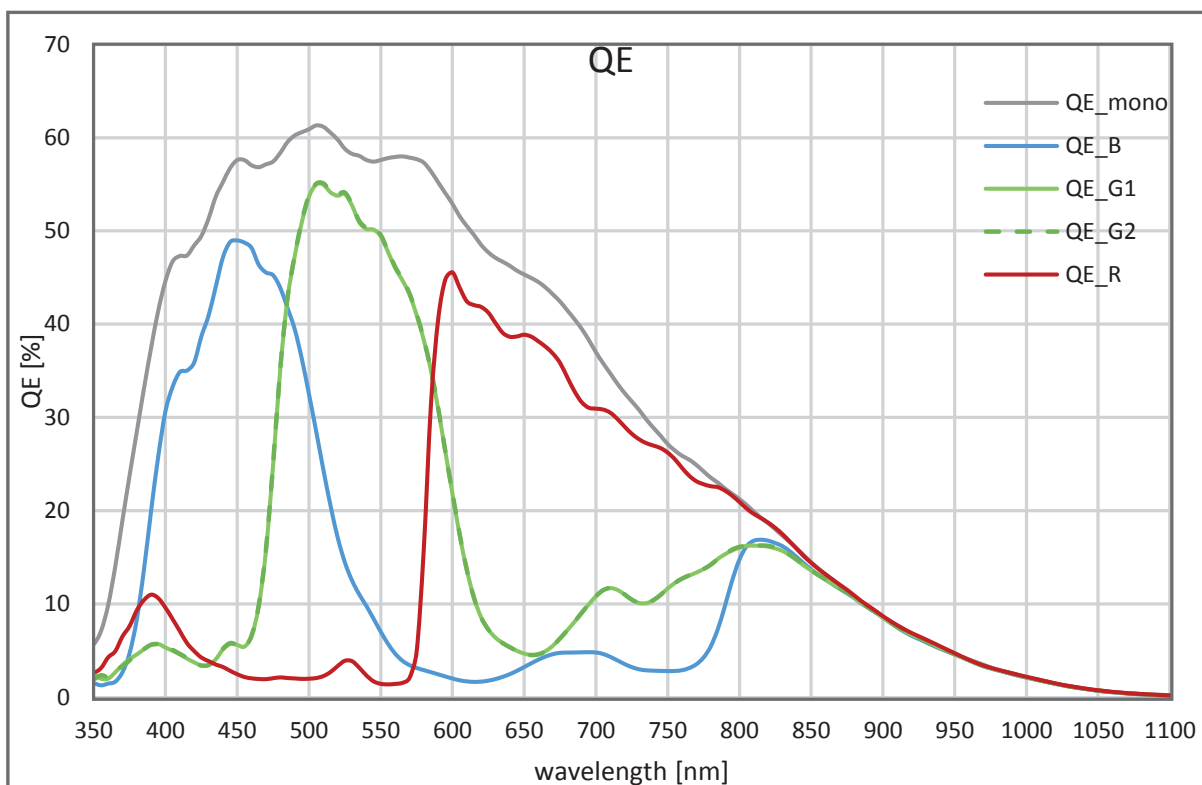
Specifications

Model		VC-50MX-M/C 30		
Resolution (H × V)		7920 × 6004		
Sensor		AMS CMOSIS CMV 50000		
Sensor Size (Optical Diagonal)		35 mm (45.72 mm)		
Sensor Type		High Speed CMOS Image Sensor		
Pixel Size		4.6 μm × 4.6 μm		
Interface		CoaXPress		
Max. Frame Rate		1CH: 7.7 fps @ 6.25 Gbps	2CH: 15.5 fps @ 6.25 Gbps	4CH: 30.9 fps @ 6.25 Gbps
Exposure Time (1 μs step)		1 μs – 60 s		
Partial Scan (Max. Speed)		3968 fps at 4 Lines		
Pixel Data Format	Mono	Mono 8 / Mono 10 / Mono 12		
	Color	BG Bayer 8 / BG Bayer 10 / BG Bayer 12		
Electronic Shutter		Global Shutter		
Exposure Mode		Free-Run, Timed and Trigger Width		
Dynamic Range		64 dB		
Gain Control		1 × ~ 30 × (1/1024 step)		
Black Level Control		0 ~ 256 LSB at 12 bit (1 LSB step)		
Dimension / Weight		80 mm × 80 mm × 112 mm, 760 g		
Temperature		Operating: -5°C ~ 40°C, Storage: -40°C ~ 70°C		
Vibration / Shock		3G (20 ~ 200 Hz) XYZ / 10G 6 ms		
Lens Mount		F-mount, Custom mount available upon request		
Power	External	10 ~ 24 V DC, Typ. 12.0 W		
	PoCXP	24 V DC, Minimum of two PoCXP cables required		
Compliance		CE, FCC, KC		
API SDK		Viewworks Imaging Solution 7.X		

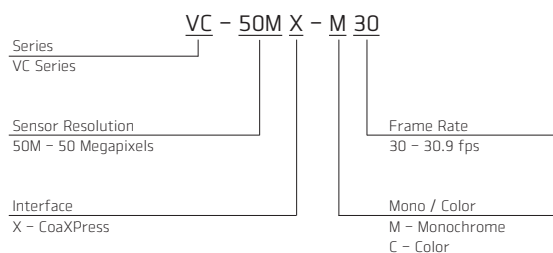
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Quantum Efficiency Curves



Ordering Scheme



Connector Specification

Power



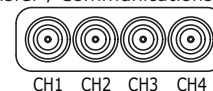
1 2 3: +12V DC, 4 5 6: GND
(HR10A-7R-6PB)

Control



1: Trigger IN+, 2: Trigger IN-
3: Strobe Out-(GND), 4: Strobe OUT+
(HR10A-7R-4S)

Data Transfer / Communications



CH1: Master Connection
(75 Ω , DIN 1.0/2.3)

Connectors on camera body

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Mechanical Dimensions

Unit: mm

