

VN-200MX

200 MEGAPIXEL PIXEL SHIFTING CAMERA WITH COAXPRESS INTERFACE



The VN-200MX, the latest member of the industrial proven VN series, is the highest CMOS pixel shifting camera equipped with the CoaXPress interface. It features 50 megapixel resolution with frame rate up to 30 fps. This is the highest pixel shifting camera whose resolution is extended from 50 MP up to 427 MP through vieworks' iconic pixel shifting technology. With the VN-200MX, customers in the industrial market can take advantage of 427 million pixel resolution at 3 fps. Its CoaXPress interface supports transmitting image data at up to 6.25 Gbps using a single coaxial cable and up to 25 Gbps using four cables. Featured with high speed and high resolution, this new technology is ideal for inspection systems such as FPD, PCB and semiconductor as well as 3D imaging and digitizing of different objects.

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Main Features

- * 50 Megapixel Resolution (AMS CMOSIS)
- * Nano Stage Pixel Shifting Mechanism
- * Extended Resolution up to 427 MP at 3 fps (9 Shot Mode)
- * CoaXPress Interface up to 30 fps at 25 Gbps using 4 CH
- * Pixel Defect Correction
- * Flat Field Correction
- * DSNU and PRNU Correction

Applications

- * FPD and PCB Inspection
- * Semiconductor Inspection
- * High Speed 3D Imaging
- * Digitizing and Scanning
- * Research and Scientific Imaging

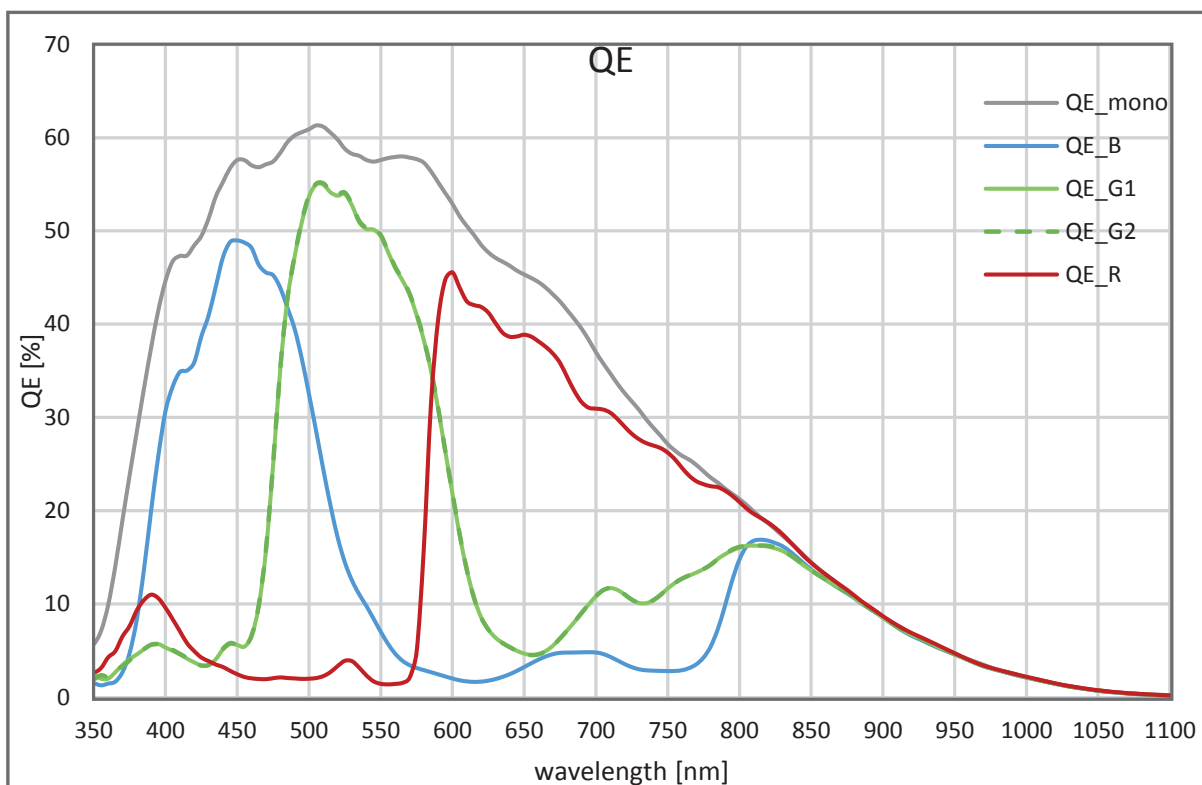
Specifications

Model		VN-200MX-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	47.5 MP	1CH: 7.7 fps @ 6.25 Gbps	2CH: 15.5 fps @ 6.25 Gbps	4CH: 30.9 fps @ 6.25 Gbps
	190 MP	1CH: 2 fps @ 6.25 Gbps	2CH: 3.9 fps @ 6.25 Gbps	4CH: 7.7 fps @ 6.25 Gbps
	427 MP	1CH: 1 fps @ 6.25 Gbps	2CH: 1.7 fps @ 6.25 Gbps	4CH: 3.4 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)		
Shift Range		0 ~ 7.5 μm, 1 nm step		
Shift Resolution		0.001 μm		
Shift Control		Sequence Mode (mono4, mono9, mono2H, mono2V, bayer4, bayer16)		
Dimension / Weight		80 mm × 80 mm × 150 mm, 1,100 g		
Temperature		Operating: -5°C ~ 40°C, Storage: -40°C ~ 70°C		
Lens Mount		F-mount, Custom mount available upon request		
Power	External	10 ~ 24 V DC, Typ. 14.0 W		
	PoCXP	24 V DC, Minimum of two PoCXP cables required		
Compliance		CE, FCC, KC		
API SDK		Viewworks Imaging Solution 7.X		

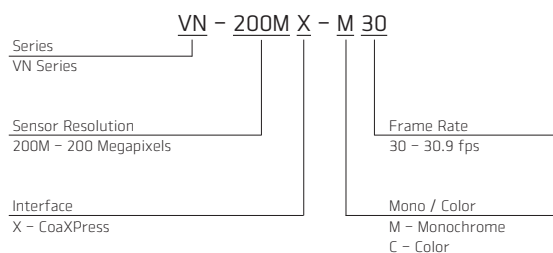
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Quantum Efficiency Curves



Ordering Scheme



Connector Specification

Power



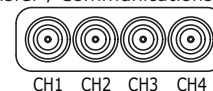
1 2 3: +12V DC, 4 5 6: GND
(HR10A-7R-6PB)

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

