

## VN-25MX-M/C 72

### PIXEL SHIFTING CAMERA WITH COAXPRESS INTERFACE



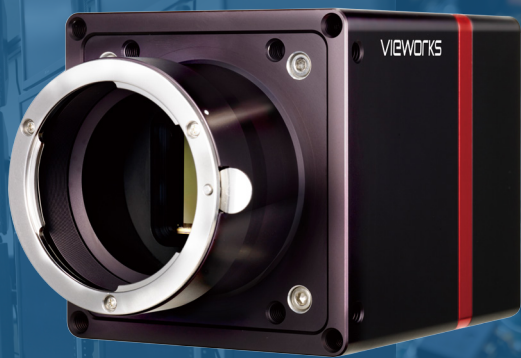
The VN-25MX, the new model of the VN series, is the world first CMOS pixel shifting camera equipped with new CoaXPress interface and based on the latest CMOS global shutter imager. It features 25 megapixel resolutions with frame rate up to 72 fps. It is the first 100 MP camera whose resolution is extended from 25 MP up to 100 MP through vieworks' genuine pixel shifting technology. With the VN-25MX, customers in the industrial market can take advantage of 100 million pixels resolution at 18 fps which is higher speed than ever. 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 brand new technology is ideal for inspection systems such as FPD, PCB and semiconductor as well as 3D imaging and digitizing of different objects.

#### Main Features

- \* 25 Megapixels Resolution
- \* High Speed Progressive Scan CMOS Imager
- \* Global Shutter CMOS Technology
- \* CoaXPress Interface up to 72 fps at 25 Gbps using 4 coax cables (4CH)
- \* Pixel Shifting Mechanism
- \* Extended Resolution up to 100 MP at 18 fps (4 Shot Mode)

#### Applications

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



# VN-25MX-M/C 72

PIXEL SHIFTING CAMERA  
WITH COAXPRESS INTERFACE

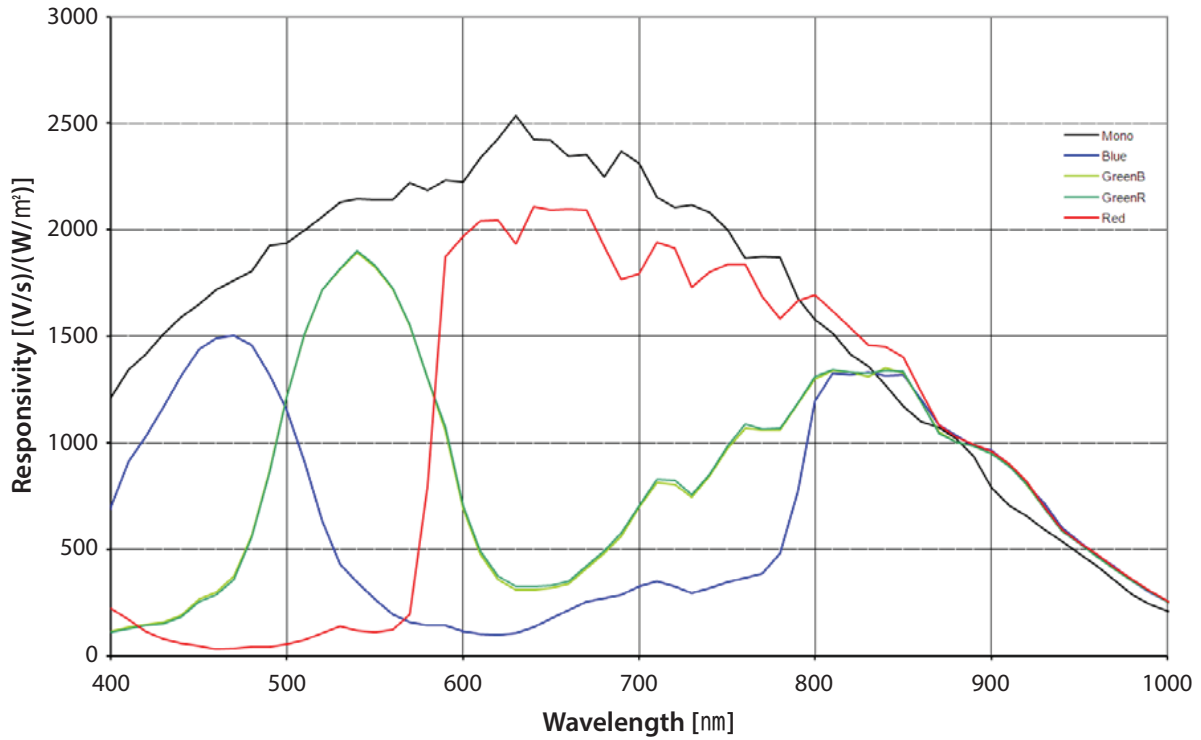


## Specifications

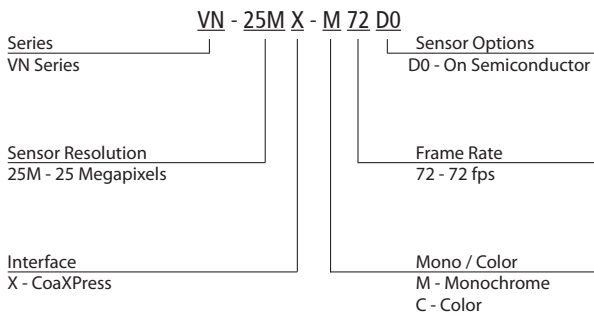
Model		VN-25MX-M/C 72	
Resolution (H × V)		5120 × 5120	
Sensor		On Semiconductor VITA-25K	
Sensor Size (Optical Format)		23.04 mm × 23.04 mm (35 mm)	
Sensor Type		High Speed CMOS Image Sensor	
Pixel Size		4.5 μm × 4.5 μm	
Interface		CoaXPress	
Max. Frame Rate	25 M	2 CH: 36 fps	4 CH: 72 fps @ 6.25 Gbps
	100 M	2 CH: 9 fps	4 CH: 18 fps @ 6.25 Gbps
Shutter Speed (1 μs step)		1 μs - 60 s	
Partial Scan (Max. Speed)		7692 fps at 4 Lines (H: 256)	
Pixel Data Format		8 bit, 10 bit	
Electronic Shutter		Global Shutter	
Gain Control		×1 ~ ×4	
Black Level Control		0 - 16 LSB at 8 bit, 0 - 64 LSB at 10 bit	
Exposure Mode		Free-Run, Timed, Trigger Width	
Dynamic Range		54 dB	
Shift Range		0 ~ 7.5 μm, 1 nm step	
Shift Resolution		0.001 μm	
Shift Control		Sequence Mode(mono4, mono9, mono2H, mono2V, color4, color16, color36)	
Dimension /Weight (F-mount)		80 mm × 80 mm × 150 mm, 1100 g	
Temperature		Operating: 0°C ~ 40°C Storage: -40°C ~ 70°C	
Lens Mount		F-mount	
Power	Adapter	11 ~ 30 V DC, MAX. 14 W	
	PoCXP	24 V DC, Minimum of two PoCXP cables required	
API SDK		Vieworks Imaging Solution 7.X	

# Quantum Efficiency Curves

## VN-25MX

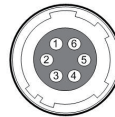


## Ordering Scheme



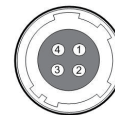
## Connector Specification

### Power



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

### Control



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

### Data Transfer/Communications

#### DIN

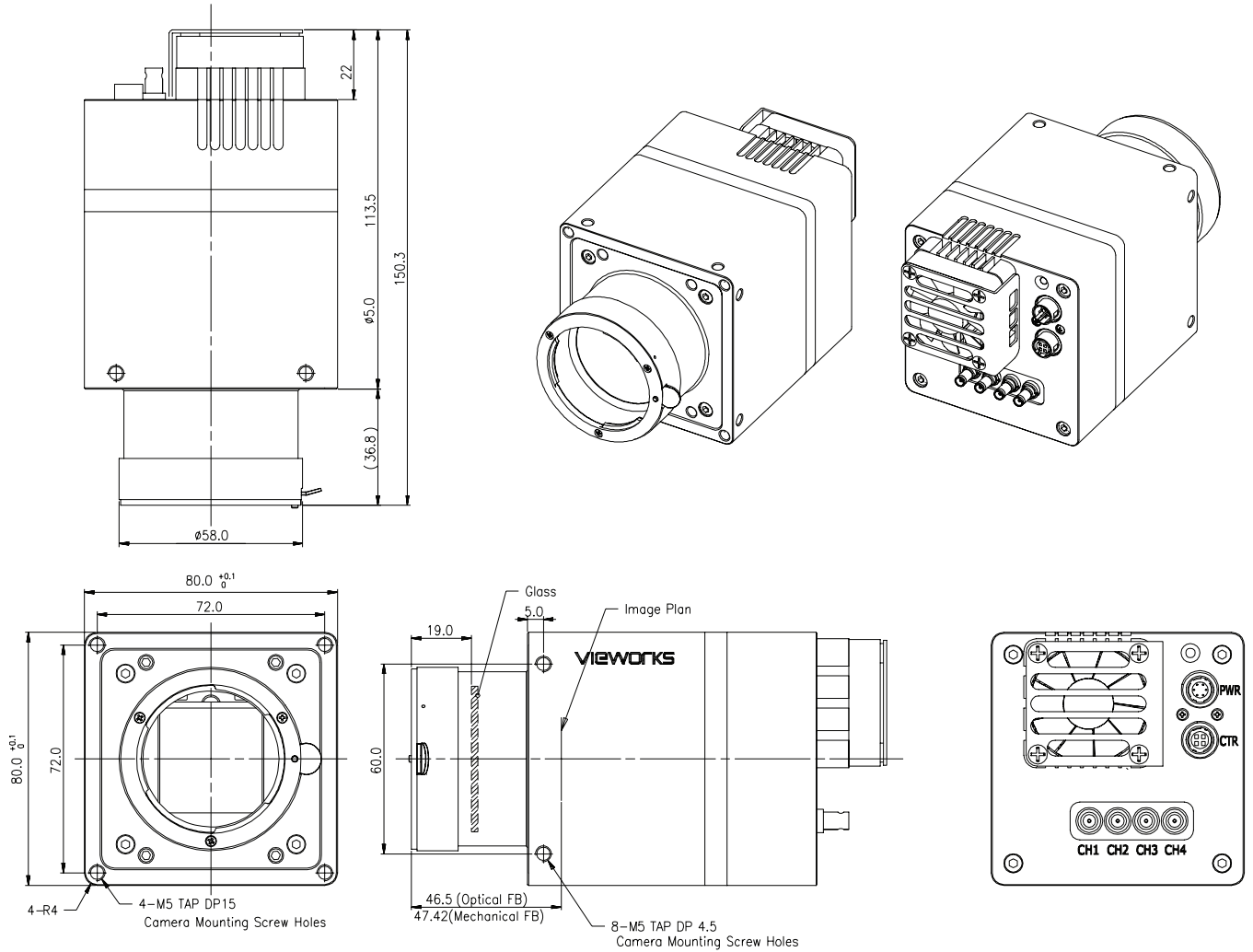


CH1 CH2 CH3 CH4  
CH1: Master Connection (75 Ω, DIN 1.0/2.3)

Connectors on camera body

# Mechanical Dimensions

Unit : mm



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## VIEWORKS

ISO 9001, ISO 13485

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