VN-29MC-M/C5

NANO STAGE PIXEL SHIFTING CAMERA FOR EXTENDED RESOLUTIONS





The VN-29MC is a 29 megapixel CCD camera equipped with the Camera Link interface. This camera is designed for applications where the object is stationary and extremely high resolution is required. Equipped with the Vieworks' advanced pixel shifting technology based on a precise piezoelectric stage, its resolution can be extended from 29 megapixels up to 260 megapixels. With the VN-29MC, customers in the industrial imaging market can take advantage of 260 million pixel resolution at the 9 shot mode. This camera is ideal for applications such as FPD inspection, document/film scanning, research and scientific imaging.



Main Features

- * Nano Stage Pixel Shifting Mechanism
- * Extended Resolutions up to 260 Megapixels
- * True Color Full Image Resolution
- * Improved Fill Factor
- * Progressive Scan Interline Transfer CCD Imager
- * Flat Field Correction
- * Field Upgradable Firmware
- * Pixel Defect Correction

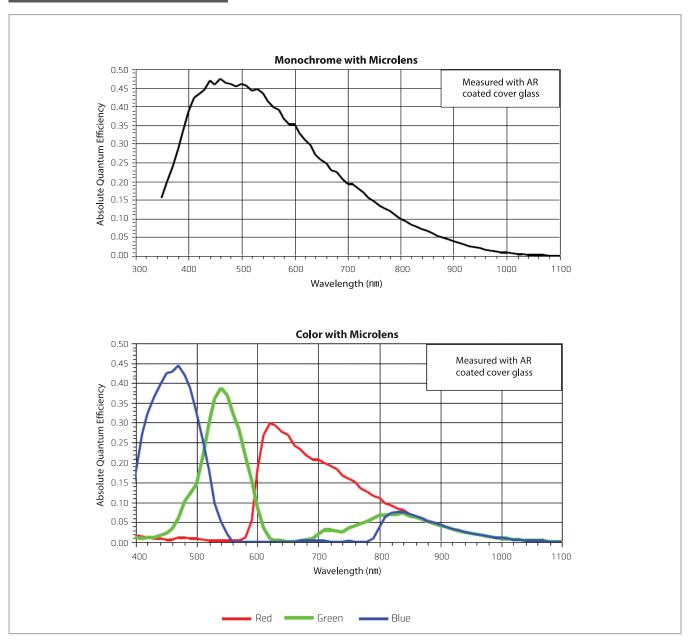
Applications

- * Flat Panel Display Inspection
- * Electronics and Semiconductor Inspection
- * Digitizing and Scanning
- * Scientific Imaging

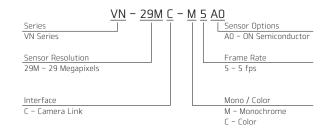
Specifications

Model		VN-29MC-M/C 5
Resolution (H × V)	×1 Mode	6576 × 4384, 28.8M
	×4 Mode	13152 × 8768, 115.3M
	×9 Mode	19728 × 13152, 259.5M
Sensor (On Semiconductor)		KAI-29050
Sensor Size (Optical Format)		35 mm
Sensor Type		Progressive Scan Interline Transfer CCD
Pixel Size		5.5 μ m $ imes$ 5.5 μ m
Interface		Camera Link
Max. Frame Rate (40 M½)	×1 Mode	5 fps
	×4 Mode	1.3 fps
	×9 Mode	0.6 fps
Exposure Time (10 µs step)		1/100000 s - 7 s
Partial Scan (Max. Speed)		15.3 fps at 1200 Lines
Pixel Data Format		8 / 10 / 12 bit
Electronic Shutter		Global Shutter
Camera Link Pixel Clock		40/80 MHz
Trigger Mode		Free-Run, Overlap, Fast, Double – Programmable Exposure Time and Trigger Polarity
Dynamic Range		62 dB
Shift Range		$0\sim15~\mu\mathrm{m}$, 1 nm step
Shift Resolution		0.001 μm
Shift Control		Manual Mode or Sequence Mode (4/9 Shot Mono, 4/16/36 Shot Color)
Shift Latency		< 8 ms
Dimension / Weight		90 mm × 90 mm × 123.5 mm, 1200 g
Temperature		Operating: 10°C ~ 40°C, Storage: −40°C ~ 70°C
Lens Mount		F-mount, Custom mount available upon request
Power		10~14 V DC, Typ. 10 W
Compliance		CE, FCC, KC
Configuration Software		Configurator

Quantum Efficiency Curves



Ordering Scheme



Connector Specification

Power



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

Control

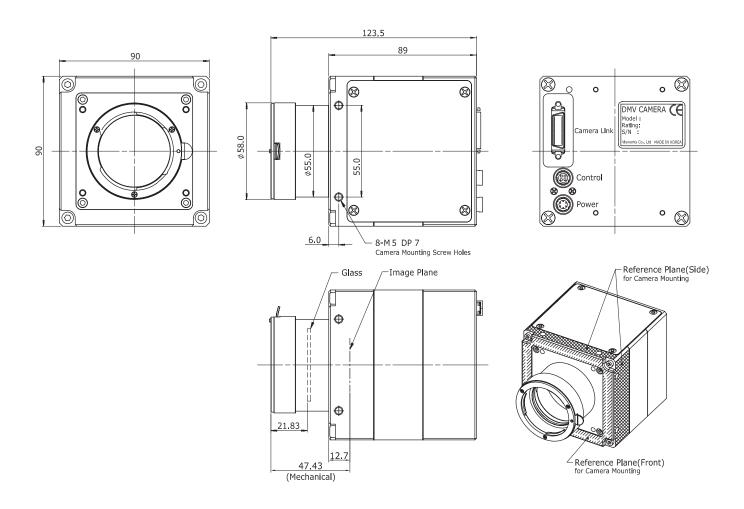


1: Trigger IN+, 2: Trigger IN-3: Strobe Out-(GND), 4: Strobe OUT+ (HR10A-7R-4S)

Connectors on camera body

Mechanical Dimensions

Unit: mm



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