VC-5/9/18MC Series

5/9/18 Megapixel High Speed CMOS Digital Camera

Pyramid Imaging

The VC-5/9/18MC cameras, the latest model of the industrial proven VC series, are new 5/9/18-megapixel cameras with the Camera Link interface.

The VC-5/9/18MC cameras use the latest CMOS global shutter image sensor(GMAX 2505, 2509, 2518) technology from Gpixel. In the case of the VC-5MC-120I camera, it offers up to 120.6 frames per second at 2,592 × 2,160 resolution. These combinations of high resolution, high speed and global shutter set a new standard for industrial, scientific and surveillance digital imaging applications. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC-5/9/18MC cameras offer not only highly uniformed images but also high speed image processing capabilities. Featured with high quality image uniformity and high resolution, this camera is ideal for wide range of demanding applications such as FPD, PCB and semiconductor inspections.

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Main Features

- High Speed 5/9/18 Megapixel CMOS Image Sensor
- Camera Link Full Interface up to 120.6 fps
- Power over Camera Link (PoCL)
- Global Shutter CMOS Technology
- DSNU and PRNU Correction
- Flat Field Correction
- GenICam Compatible – XML based Control

Applications

- Flat Panel Display Inspection
- Electronics Inspection
- Semiconductor Inspection
- Document / Film Scanning
- Factory Automation, Robotics or AOI

Specifications

Model		VC-5MC-M/C120	VC-9MC-M/C90	VC-18MC-M/C45
Resolution (H × V)		2,600 × 2,160	4,200 × 2,160	4,504 × 4,096
Sensor		Gpixel GMAX2505	Gpixel GMAX2509	Gpixel GMAX2518
Sensor Size (Diagonal)		6.5 ㎜ ×5.4 ㎜ (8.45 ㎜)	10.5 ㎜ ×5.4 ㎜ (11.8 ㎜)	11.27 ㎜ ×10.24 ㎜ (15.22 ㎜)
Sensor Type		High Speed CMOS Image Sensor		
Pixel Size		2.5 ㎛ × 2.5 ㎛		
Interface		Camera Link Base / Medium / Full / 10 Tap, 26-pin SDR Connector		
Max. Frame Rate		2 Tap: 29.7 fps 4 Tap: 58.7 fps 8 Tap: 114.6 fps 10 Tap: 120.6 fps	2 Tap: 18.4 fps 4 Tap: 36.5 fps 8 Tap: 72.0 fps 10 Tap: 90.7 fps	2 Tap: 9.1 fps 4 Tap: 18.0 fps 8 Tap: 35.6 fps 10 Tap: 44.9 fps
Exposure Time (1 ㎲ step)		1 ㎲ – 60 s		
Partial Scan (Max. Speed)		11695.9 fps at 2Lines (10 Tap)	8796.2 fps at 2Lines (10 Tap)	6172.8 fps at 2Lines (10 Tap)
Pixel Data Format	Mono	Mono 8 / 10 / 12		
	Color	GB Bayer 8 / 10 / 12		
Electronic Shutter		Global Shutter		
Digital Gain		1× ~ 32×		
Black Level Control		0 – 255 LSB at 12 bit (1 LSB step)		
Exposure Mode		Free-Run, Timed, Trigger Width		
External Trigger		3.3 V ~ 24.0 V, 10mA, Logical Level Input Optically isolated, CC1		
Software Trigger		Asynchronous, Programmable via Camera API		
Dynamic Range		65 dB		
Dimension / Weight		40.0 ㎜ × 40.0 ㎜ × 51 ㎜, 130 g (C-mount)		
Temperature		Operating: 0℃ ~ 40℃, Storage: -40℃ ~ 70℃		
Lens Mount		C-mount		
Power		11 ~ 24 V DC, Typ. 6 W, PoCL supported		
Compliance		CE, FCC, KC		

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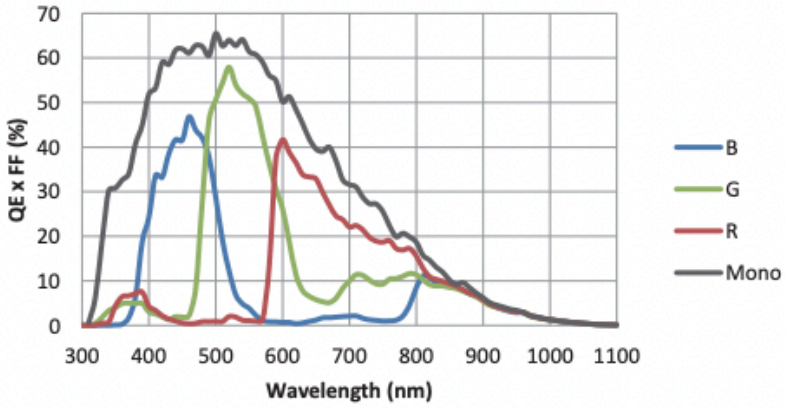
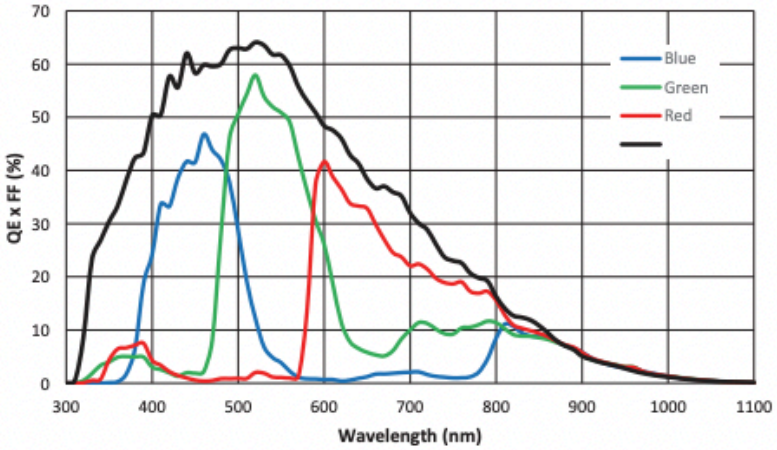
Spectral Response

VC-5/9MC



VC-18MC



Ordering Scheme

VC - 5M C - M 120 I

Series					Sensor Options
VC Series					I - Gpixel CMOS
Sensor Resolution					Frame Rate
5, 9, 18 Megapixels					120 fps
Interface					Mono / Color
Camera Link					M - Monochrome
					C - Color

Connector Specification

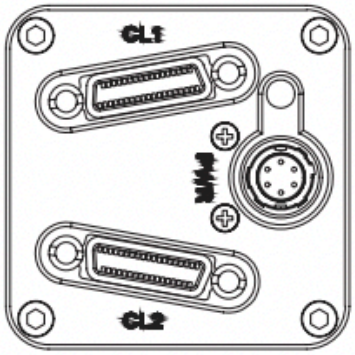
Power / Control

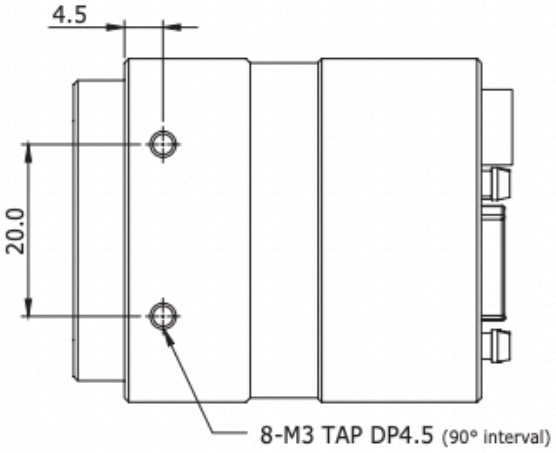
1: +12V DC
2: Trigger IN+
3: Trigger IN-
4: Output+
5: Output-
6: DC Ground
(HR10A-7R-6PB)

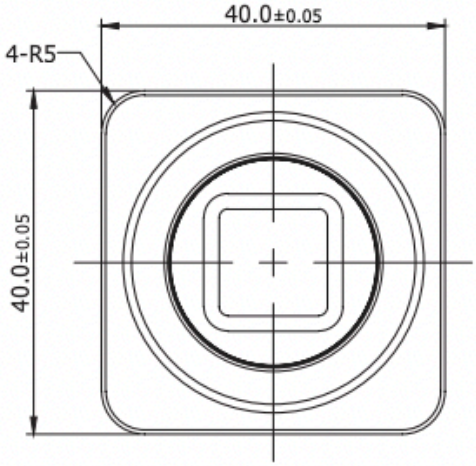
Connectors on camera body

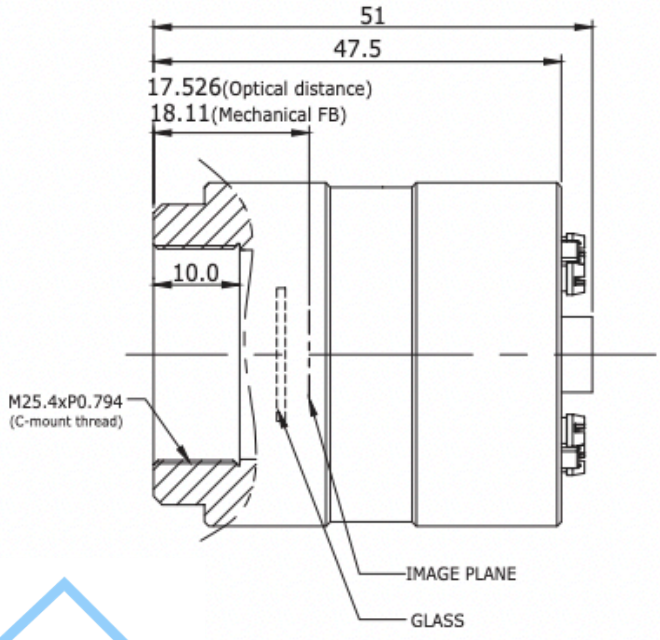
Mechanical Dimensions

Unit: mm









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