# VC-103MC-M/C7I

Ultra High Resolution CMOS Digital Camera



The VC-103MC, the latest model of the industrial proven VC series, is 103-megapixel resolution CMOS cameras available with the Camera Link interface. These cameras are based on the latest CMOS image sensor technology (GMAX32103) from Gpixel. The VC-103MC offers up to 7.6 frames per second at  $11,264 \times 9,200$  resolution. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC-103MC camera offers not only highly uniformed images but also high-speed image processing capabilities. Featured with high quality image uniformity and high resolution, these cameras are ideal for demanding applications such as FPD, PCB and semiconductor inspections.



#### **Main Features**

- 103 Megapixel Resolution
- Camera Link Full Interface
- DSNU and PRNU Correction
- Flat Field Correction with Sequencer Control
- Hot Pixel Correction
- Dynamic Defective Pixel Correction

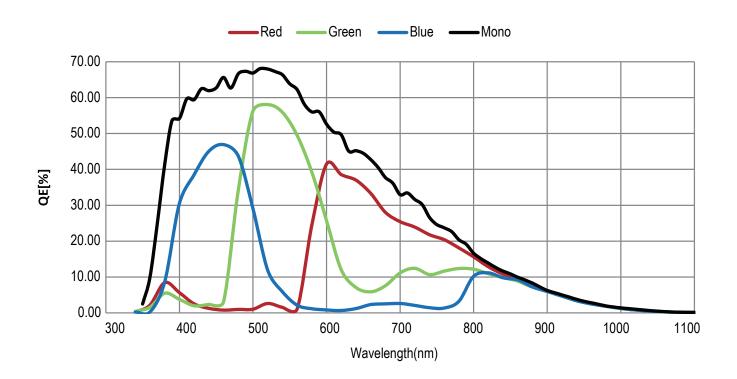
### **Applications**

- Flat Panel Display Inspection
- Electronics Inspection
- Semiconductor Inspection
- Document / Film Scanning

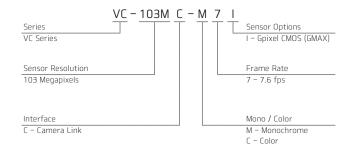
# **Specifications**

Model		VC-103MC-M/C7I
Resolution (H $ imes$ V)		11,264 × 9,200
Sensor		GMAX32103
Sensor Size (Diagonal)		36.1 mm × 29.4 mm (Photo Sensitive Area)
Pixel Size		3.2 $\mu$ m $ imes$ 3.2 $\mu$ m
Interface		Camera Link Base/Medium/Full/10-taps, 2 channels of 26-pin SDR Connector
Max. Frame	4-taps	3.0 fps
Rate	8-taps	6.1 fps
(8 bit)	10-taps	7.6 fps
Exposure Time (1 $\mu$ s step)		1 μs – 60 s (1 μs Step)
Binning		×1, ×2, ×4(Monochrome), Horizontal and Vertical Independent
Pixel Data	Mono	8/10/12 bit
Format	Color	GB Bayer 8/10/12 bit
Electronic Shutter		Global Shutter
Exposure Mode		Free-Run, Timed, TriggerWidth
Dynamic Range		Typical 66 dB at 12 bit
Cooling Method		Standard Cooling with a Fan
Gain Control	Analog	1.4× ~ 5.2×
	Digital	1.0× ~ 32.0×
Black Level Control		0 – 255 LSB at 12 bit
Dimension / Weight		80 mm $ imes$ 80 mm $ imes$ 85 mm, 0.55 kg (with M72-mount)
Temperature		Operating: 0°C ~ 40°C, Storage: −40°C ~ 70°C
Lens Mount		M72-mount
Power	External	11 ~ 24 V DC
	Dissipation	Typical 16 W, Maximum 20 W
Compliance		CE, FCC, KC
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#### **Relative Sensitivity Curves**



## **Ordering Scheme**



# **Connector Specification**



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

