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VC-71MC-M/C 4

71 MEGAPIXELS

ULTRA HIGH RESOLUTION CMOS DIGITAL CAMERA



The VC–71MC, the latest member of the industrial proven VC series, is a new 71 megapixel resolution CMOS camera with Camera Link interface. The VC–71MC uses the latest 71 megapixel CMOS imaging sensor (CHR 70M) technology from CMOSIS, and offers a frame rate of 4 fps at full resolution. Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC–71MC camera offers 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 demanding applications such as FPD, PCB, and semiconductor inspections.



Main Features

- * 71 Megapixel Resolution
- * Ultra High Resolution CMOS Imaging Sensor
- * Camera Link Medium Interface up to 4.2 fps
- * Rolling Shutter
- * Flat Field Correction
- * Pixel Defect Correction
- * Non-uniformity Correction (DSNU and PRNU)
- * Field Upgradable Firmware

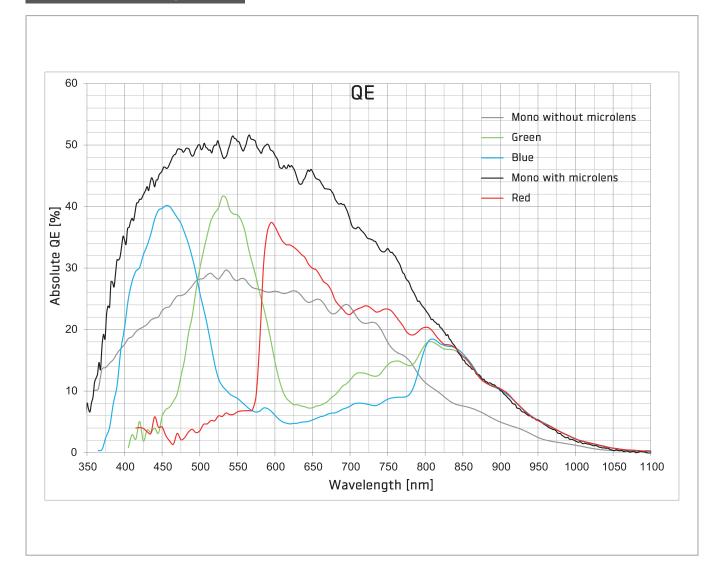
Specifications

Applications

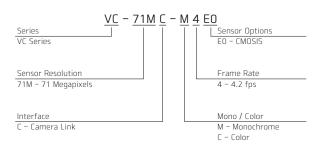
- * FPD, Electronics and Semiconductor Inspection
- * Research and Scientific Imaging
- * Document / Film Scanning

Resolution (H × V)10000 × 7096 \blacksquare sensorSensor SizeOptical Format31.00 mm × 22.00 mm (38 mm)Sensor SizeOptical Format31.00 mm × 22.00 mm (38 mm) \blacksquare sensorTypeHigh Resolution CMOS Imaging Sensor \blacksquare sensorSize3.1 μ m × 3.1 μ mInterface4 Tap - Normal 4 Tap - HighCamera Link BaseMaxFrame Rate2.1 fps (CL Base) 3.0 fps (CL Medium)MaxFrame Rate4 Tap - Normal 3.0 fps (CL Medium)MaxFrame Rate3.0 fps (CL Medium) 3.0 fps (CL Medium)Transfer Time328 ms (CL Medium) 3.35 ms (CL Medium)
Sensor Size (Optical Format) $31.00 \text{ mm} \times 22.00 \text{ mm} (38 \text{ mm})$ Sensor TypeHigh Resolution CMOS Imaging Sensor $Fixel Size$ $3.1 \mu m \times 3.1 \mu m$ $Interface$ 2 Tap $4 \text{ Tap} - Normal$ Camera Link Base $4 \text{ Tap} - High$ $2.1 \text{ fps} (CL Base)$ $Max. Frame Rate$ $3.0 \text{ fps} (CL Medium)$ $4.2 \text{ fps} (CL Medium / Overclocked)$ $Irterface Frime$ $476 \text{ ms} (CL Base)$ $Irterface Frime$ $325 \text{ ms} (CL Medium)$
Ser TypeHigh Resolution CMOS Imaging SensorPixel Size $3.1 \mu \times 3.1 \mu m$ Interface $2 Tap$ Camera Link Base $4 Tap - Normal$ Camera Link Medium $4 Tap - High$ $2.1 fps (CL Base)$ Max. Frame Rate $3.0 fps (CL Medium)$ Max. Frame Rate $4.2 fps (CL Medium / Overclocked)$ Trace $4.76 ms (CL Base)$ Trace $4.76 ms (CL Base)$ Trace $4.76 ms (CL Medium)$
Pixel Size $3.1 \mu \times 3.1 \mu$ 2 TapCamera Link Base4 Tap - NormalCamera Link Medium4 Tap - HighCamera Link MediumMax. Frame Rate $3.0 fps (CL Base)$ Max. Frame Rate $3.0 fps (CL Medium) / Overclocked)$ Trarsfer Time $476 ms (CL Base)$ Starsfer Time $335 ms (CL Medium)$
2 TapCamera Link BaseInterface4 Tap - Normal 4 Tap - HighCamera Link MediumA Tap - HighCamera Link MediumMax. Frame Rate2.1 fps (CL Base) 3.0 fps (CL Medium) 4.2 fps (CL Medium / Overclocked)Max. Frame Rate476 ms (CL Base) 335 ms (CL Medium)
Interface 4 Tap - Normal 4 Tap - High Camera Link Medium Max. Frame Rate 2.1 fps (CL Base) Max. Frame Rate 3.0 fps (CL Medium) 4.2 fps (CL Medium / Overclocked) 4.3 fps (CL Base) 4.3 fps (CL Medium / Overclocked)
4 Tap - High Camera Link Medium 4 Tap - High 2.1 fps (CL Base) Max. Frame Rate 3.0 fps (CL Medium) 4.2 fps (CL Medium / Overclocked) 4.2 fps (CL Medium / Overclocked) Transfer Time 335 ms (CL Medium)
4 Tap - HighA Tap - High
Max. Frame Rate3.0 fps (CL Medium)4.2 fps (CL Medium / Overclocked)476 ms (CL Base)Transfer Time335 ms (CL Medium)
4.2 fps (CL Medium / Overclocked) 476 ms (CL Base) Transfer Time 335 ms (CL Medium)
476 ms (CL Base) Transfer Time 335 ms (CL Medium)
Transfer Time 335 ms (CL Medium)
220 mg (CL Madium / Overslasted)
238 ms (CL Medium / Overclocked)
Exposure Time $66 \ \mu s \sim 7 \ s \ (1 \ line \ step)$
Pixel Data Format 8 / 10 / 12 bit
Electronic Shutter Rolling Shutter
Data Output 2 Tap 85 MHz
Pixel Clock Speed 4 Tap Normal: 60 MHz / High: 85 MHz
Trigger Mode Free–Run, External Trigger Programmable Exposure Time and Trigger Polarity
Dynamic Range 63 dB
Dimension / Weight $68 \text{ mm} \times 68 \text{ mm} \times 103 \text{ mm}, 420 \text{ g} (F-mount)$
Temperature Operating: 0°C ~ 40°C, Storage: −40°C ~ 70°C
Lens Mount F-mount, Custom mount available upon request
Power 10 ~ 38 V DC, Typ. 7.5 W
Compliance CE, FCC, KC (in preparation)
Configuration Software Configurator

Quantum Efficiency Curves

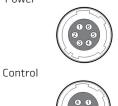


Ordering Scheme



Connector Specification

Power



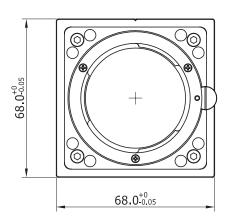
1 2 3: +12V DC, 4 5 6: GND (HR10A-7R-6PB)

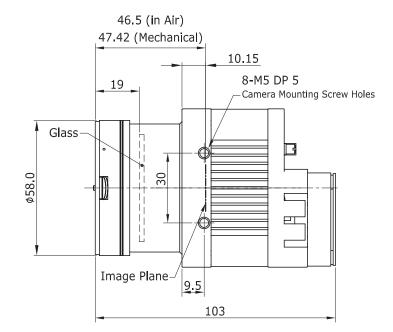
1: Trigger IN+, 2: Trigger IN-3: DC Ground, 4: Strobe OUT+ (HR10A-7R-4S)

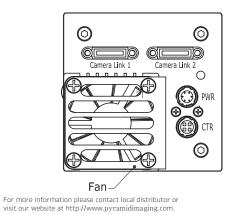
Connectors on camera body

Mechanical Dimensions

Unit: mm









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