
VP-71MC-M/C 4

71 MEGAPIXEL RESOLUTION CMOS CAMERA
WITH TEC INTEGRATED



The VP-71MC, the latest member of the industrial proven VP series, is a new 71 megapixel resolution CMOS camera with Camera Link interface. The VP-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.

This camera uses thermo-electric Peltier (TEC) cooling technology developed for, and used by, many demanding medical market customers. The TEC maintains the operating temperature of the CMOS imaging sensor at up to 20 degrees below ambient temperature. This camera provide a stable operating condition or the ability to expose for a long period of time to increase camera sensitivity. Featured with the stable operating capability and high resolution, this camera is ideal for demanding applications such as FPD, PCB, and semiconductor inspections.

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Main Features

- * Thermoelectric Peltier Cooled – 20°C below ambient temperature
- * 71 Megapixel Resolution CMOS Imaging Sensor
- * Camera Link Medium Interface up to 4.2 fps
- * Minimizing the Number of Hot Pixels with TEC (up to 99%)
- * Flat Field Correction
- * Pixel Defect Correction
- * Non-uniformity Correction (DSNU and PRNU)
- * Field Upgradable Firmware

Applications

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

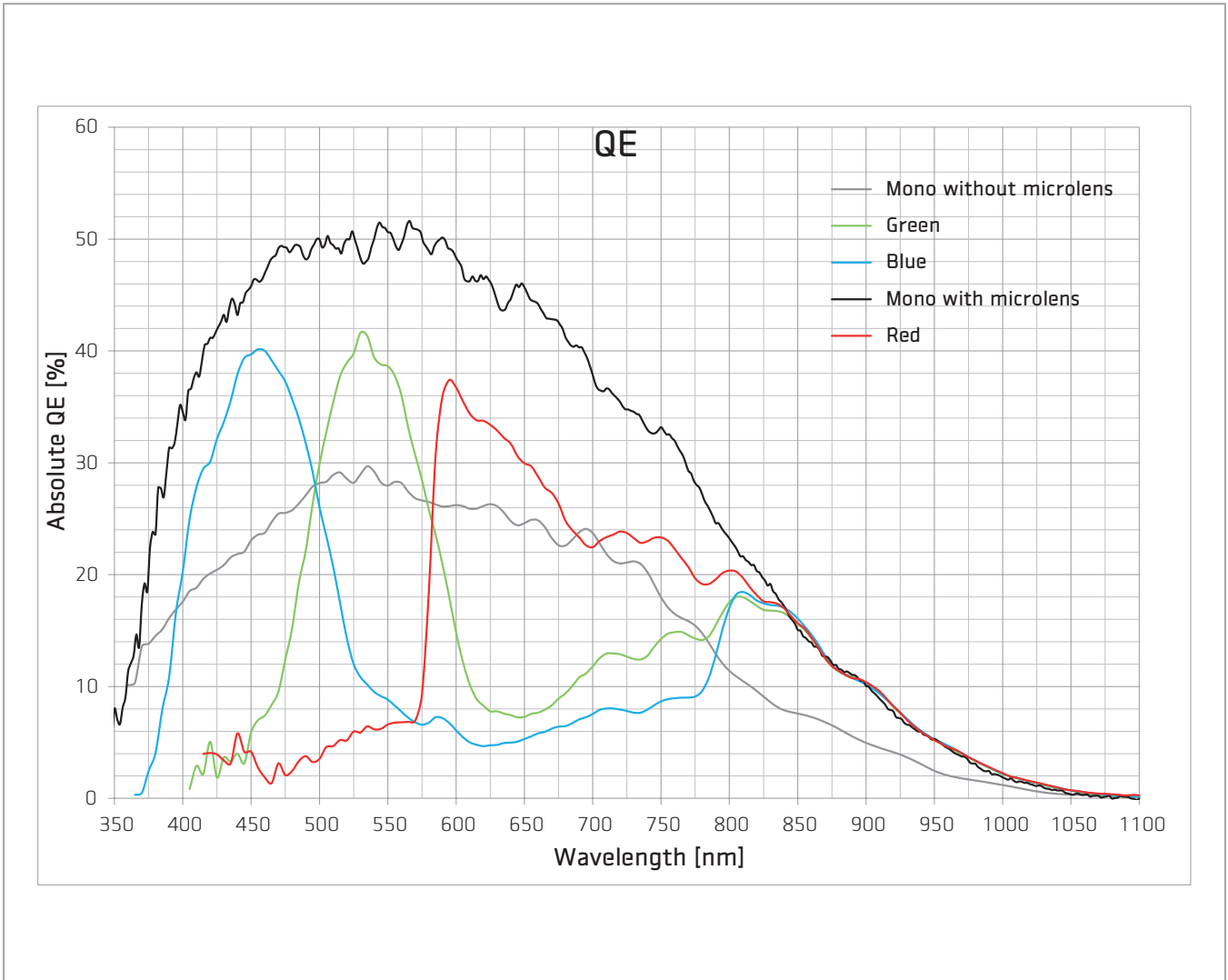
Specifications

Model	VP-71MC-M/C 4	
Resolution (H × V)	10000 × 7096	
Sensor	CMOSIS CHR70M	
Sensor Size (Optical Format)	31.00 mm × 24.11 mm (38 mm)	
Sensor Type	High Resolution CMOS Imaging Sensor	
Pixel Size	3.1 μm × 3.1 μm	
Interface	2 Tap	Camera Link Base
	4 Tap – Normal	Camera Link Medium
	4 Tap – High	
Max. Frame Rate	2.1 fps (CL Base)	
	2.9 fps (CL Medium)	
	4.2 fps (CL Medium / Overclocked)	
Transfer Time	476 ms (CL Base)	
	335 ms (CL Medium)	
	238 ms (CL Medium / Overclocked)	
Exposure Time	66 μs ~ 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	
Cooling Method	Thermoelectric Peltier Cooling	
Cooling Performance	About 20 below ambient temperature – Standard Cooling with a Fan	
Dimension / Weight	90 mm × 90 mm × 137 mm, 1500 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 ~ 24 V DC, Typ. 20.0 W	
Compliance	CE, FCC, KC	
Configuration Software	Configurator	

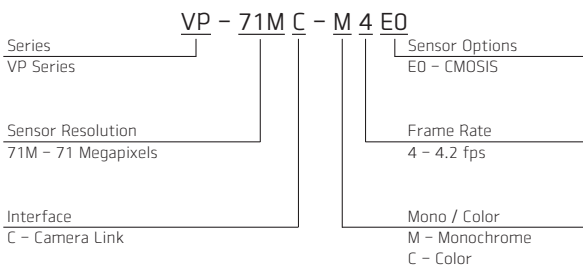
VP-71MC-4

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Quantum Efficiency Curves



Ordering Scheme



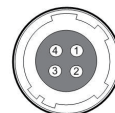
Connector Specification

Power



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

Control



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

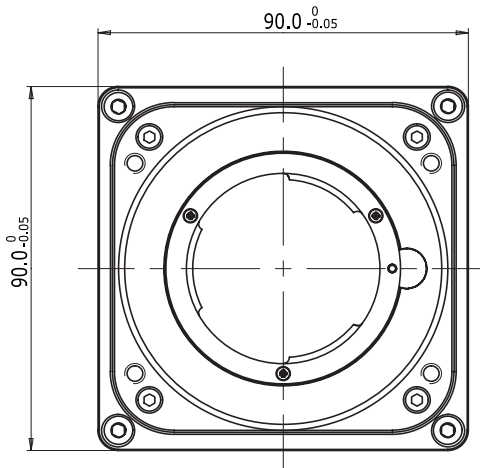
Connectors on camera body

VP-71MC-4

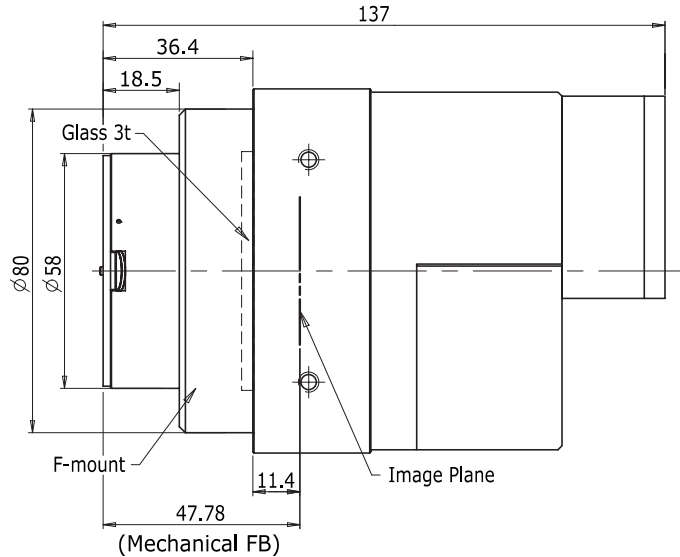
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Mechanical Dimensions

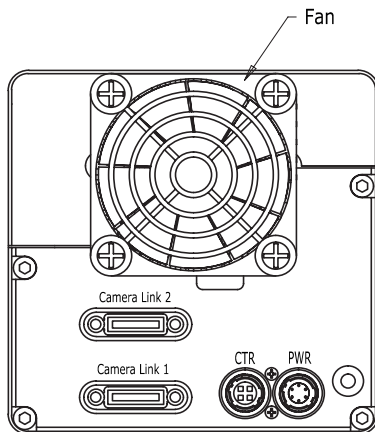
Unit: mm



<Front View>

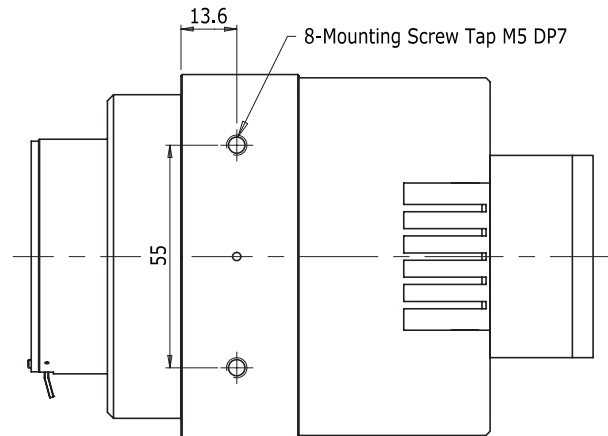


<Side View>



<Back View>

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