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.



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

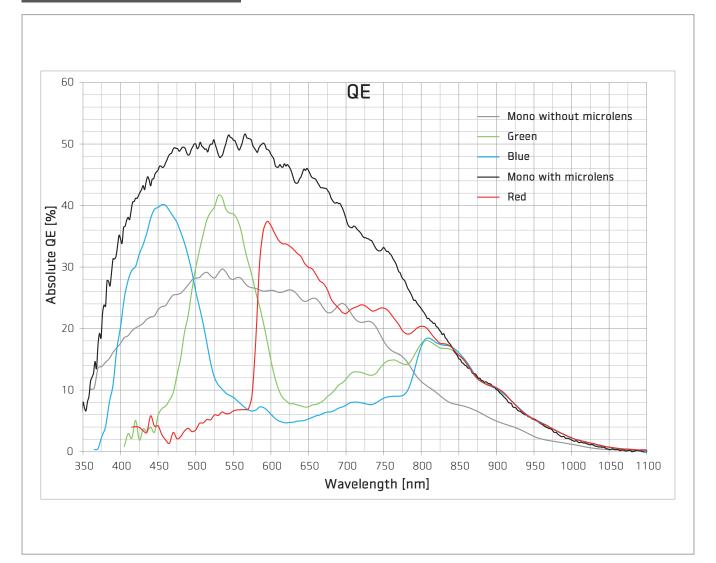
Applications

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

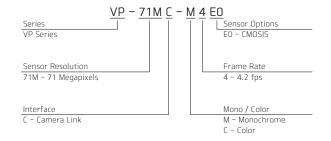
Specifications

| Model | | | VP-71MC-M/C 4 |
|------------------------------|----------------|--------|--|
| Resolution (H \times V) | | | 10000 × 7096 |
| Sensor | | | CMOSIS CHR70M |
| Sensor Size (Optical Format) | | | 31.00 mm $	imes$ 24.11 mm (38 mm) |
| Sensor Type | | | High Resolution CMOS Imaging Sensor |
| Pixel Size | | | 3.1 μ m $	imes$ 3.1 μ m |
| Interface | 2 Tap | | Camera Link Base |
| | 4 Tap – Normal | | Company Linds Mandison |
| | 4 Tap - | - High | Camera Link Medium |
| 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 Ou | tput | 2 Тар | 85 MHz |
| Pixel Clock | Speed | 4 Тар | Normal: 60 Mk / High: 85 Mk |
| Trigger Mode | | de | 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 $	imes$ 90 mm $	imes$ 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 |
| | | | |
| | | | |

Quantum Efficiency Curves



Ordering Scheme



Connector Specification

Power



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

Control

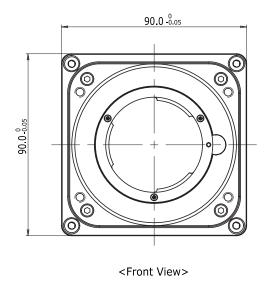


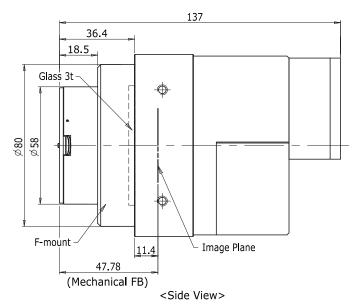
1: Trigger IN+, 2: Trigger IN-3: DC Ground, 4: Strobe OUT+ (HR10A-7R-4S)

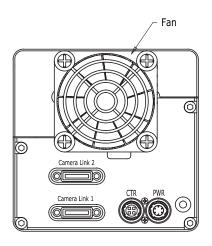
Connectors on camera body

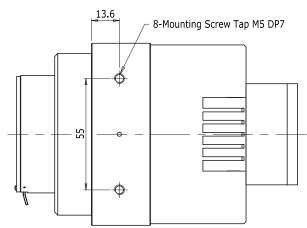
Mechanical Dimensions

Unit: mm









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