VC-17MX-M/C 61 H VC-31MX-M/C 35 H

High Performance 17MP and 31MP CMOS Digital Cameras





The VC-17MX-61 H and VC-31MX-35 H, the latest models of the industrial proven VC series, are new 17 and 31 megapixel CoaXPress cameras and based on the latest CMOS image sensor technology (IMX387 and IMX342) from Sony Semiconductor Solutions Corporation. The VC-17MX-61 H offers up to 61.3 frames per second at 5440×3076 resolution. For even higher resolution applications, the VC-31MX-35 H offers up to 35.4 frames per seconds at 6464×4852 resolution.

Equipped with the Vieworks' innovative technologies proved by world's top FPD manufacturers, the VC–17MX and VC–31MX cameras offer not only highly uniformed images but also high speed image processing capabilities. Featured with high quality image uniformity and high speed, these cameras are ideal for demanding applications such as FPD, PCB and semiconductor inspections.



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Main Features

- 17 / 31 Megapixel Resolution
- CoaXPress Interface up to 61.3 fps at 25 Gbps using 4 CH
- Global Shutter CMOS Technology
- Flat Field Correction with Sequencer Control
- PRNU Correction
- Hot Pixel Correction
- Defective Pixel Correction
- Frame Averaging
- GenlCam Compatible XML based Control

Applications

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

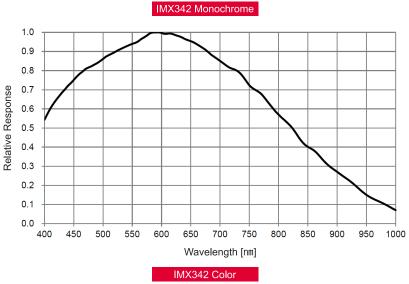
Specifications

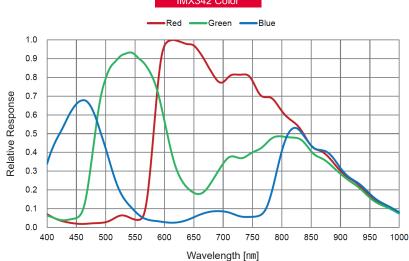
| Model | | VC-17MX-M/C 61 H | VC-31MX-M/C 35 H |
|---------------------------|-------------|--|-----------------------|
| Resolution (H $	imes$ V) | | 5440 × 3076 | 6464 × 4852 |
| Sensor | | SONY IMX387 | SONY IMX342 |
| Optical Format (Diagonal) | | 4/3" (21.7 mm) | APS-C (27.9 mm) |
| Pixel Size | | $3.45~\mu\mathrm{m}~	imes~3.45~\mu\mathrm{m}$ | |
| Interface | | CoaXPress (CXP-3 / CXP-6) | |
| Max. Frame Rate | 8 bit | 61.3 fps | 35.4 fps |
| | 10 bit | 56.5 fps | 35.4 fps |
| | 12 bit | 40.4 fps | 25.8 fps |
| Exposure Time | | 2.4 μs - 60 s | |
| Partial Scan (Max. Speed) | | 1724.0 fps at 4 Lines | 1464.7 fps at 4 Lines |
| Binning | Sensor | ×1, ×2 (Horizontal and Vertical Dependent) | |
| Pixel Data Format | Mono | Mono 8 / Mono 10 / Mono 12 | |
| | Color | RG Bayer 8 / RG Bayer 10 / RG Bayer 12 | |
| Electronic Shutter | | Global Shutter | |
| Trigger Synchronization | | Free-Run, Hardware Trigger, Software Trigger or CXP | |
| External Trigger | | 3.3 V ~ 24.0 V, 10 mA, Logical Level Input, Optically Isolated | |
| Software Trigger | | Asynchronous, Programmable via Camera API | |
| Dynamic Range | | 72 dB | |
| Gain Control | | 1×~32× | |
| Black Level Control | | 0 ~ 255 LSB at 12 bit | |
| Dimension / Weight | | 68 mm $	imes$ 68 mm $	imes$ 105 mm, 550 g (with F-mount) | |
| Temperature | | Operating: 0°C ~ 40°C, Storage: −40°C ~ 70°C | |
| Lens Mount | | F-mount, Custom mount available upon request | |
| Power | External | 11 ~ 24 V DC | |
| | Dissipation | Typ. 17.0 W | |
| | PoCXP | 24 V DC, Minimum of two PoCXP cables required | |
| Compliance | | CE, FCC, KC (in preparation) | |
| API SDK | | Vieworks Imaging Solution 7.X | |
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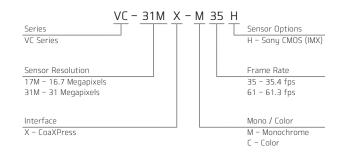
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Relative Sensitivity Curves





Ordering Scheme



Connector Specification

Power



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

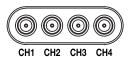
Control



1: Trigger IN+ 2: Trigger IN-3: Strobe OUT-(GND) 4: Strobe OUT+

(HR10A-7R-4S)

Data Transfer / Communications



CH1: Master Connection 75 $\,\Omega$, DIN 1.0/2.3

Mechanical Dimensions

Unit: mm

