
VS-2MU-M80

2 MEGAPIXEL sCMOS DIGITAL CAMERA WITH USB 3.0 INTERFACE



The VS-2MU is a 2-megapixel resolution scientific-CMOS (sCMOS) camera with the USB 3.0 interface. The VS-2MU camera uses the sCMOS image sensor (GSENSE2011e) technology from Gpixel and offers up to 79.4 frames per second at 2048 × 1150 resolution. Its high sensitivity featured with low noise and high quantum efficiency makes the VS-2MU camera ideal for biometry, medical and scientific applications.

VS-2MU-M80

2 MEGAPIXEL sCMOS DIGITAL CAMERA WITH USB 3.0 INTERFACE

Main Features

- * High Sensitivity 2 Megapixel sCMOS Image Sensor
- * Electronic Exposure Time Control – Rolling Shutter
- * USB 3.0 Interface up to 79.4 fps
- * Image Correction (DSNU and PRNU Correction)
- * Flat Field Correction
- * Defect Pixel Correction
- * High Dynamic Range

Applications

- * In vivo Imaging System
- * Fluorescence Resonance Energy Transfer (FRET)
- * Ca²⁺ Imaging
- * In vitro Diagnostics System
- * Fluorescence Microscopy
- * VIS/NIR Imaging
- * Quantum Dots

Specifications

| | | | |
|---------------------------|--|-----------------------|-----------------|
| Model | VS-2MU-M80 | | |
| Resolution (H × V) | 2048 × 1150 | | |
| Sensor | Gpixel GSENSE2011e | | |
| Optical Format (Diagonal) | 1" (15.26 mm) | | |
| Sensor Type | Scientific CMOS Image Sensor | | |
| Pixel Size | 6.5 μm × 6.5 μm | | |
| Quantum Efficiency | Max. 72% @ 595 nm | | |
| Full Well Capacity | 45 ke- | | |
| Noise Level | < 2e- | | |
| Interface | USB 3.0 | | |
| Max. Frame Rate | 79.4 fps | | |
| Dynamic Range | Low Gain Mode: 65 dB | High Gain Mode: 60 dB | HDR Mode: 87 dB |
| Exposure Time | 12 μs – 6 s | | |
| Partial Scan | Min. 230 Lines | | |
| Black Level Control | 0 ~ 256 LSB at 12-bit (1 LSB step) | | |
| Gain Control | 1 × ~ 4 × | | |
| Exposure Mode | Free-Run, Timed, Trigger Width | | |
| External Trigger | 3.3 V ~ 24.0 V, 10 mA, Logical Level Input, Optically Isolated | | |
| Software Trigger | Asynchronous, Programmable via Camera API | | |
| Lens Mount | C-mount | | |
| Power | 10 ~ 24 V DC, Typ. 8.5 W | | |
| Temperature | Operating: 0°C ~ 40°C, Storage: -40°C ~ 70°C | | |
| Dimension / Weight | 80 mm × 80 mm × 73 mm, 523 g (with C-mount) | | |
| API SDK | Vieworks Imaging Solution 7.X | | |

For more information please contact local distributor or visit our website at <http://www.vieworks.com>.

Reproduction in whole or in part without written permission is prohibited. Vieworks Co., Ltd. is not responsible for any technical or typographical errors and reserves the right to make changes to products, specifications and documentation without prior notice.

D-18-622

VIEWORKS

41-3, Burim-ro 170 beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055 Republic of Korea
tel +82-70-7011-6161 fax +82-31-386-8631 e-mail sales@vieworks.com