# VC-25MX2-M/C150I

## 25 Megapixel High Speed CMOS Digital Camera
## with CoaXPress 2.0 Interface



**CoaPress**®

The VC-25MX2-M/C150I, the latest model of the industrial proven VC series, is a new 25-megapixel CoaXPress camera and based on the CMOS global shutter image sensor technology (GMAX0505) from Gpixel. The VC-25MX2-150I camera offers up to 150.2 frames per second at 5,120 × 5,120 resolution. The camera comes with the next generation CoaXPress 2.0 (CXP-12) interface delivering up to 50 Gigabits per second over four coaxial cables. These combinations of the CMOS sensor technology and CoaXPress 2.0 interface set a new standard for industrial, scientific and surveillance digital imaging applications.

Customers in the industrial market can take advantage of simple coax cabling to transmit images at rates and distance above and beyond previous standards. This high-speed and high-resolution camera is ideal for wide range of demanding applications such as FPD, PCB and semiconductor inspections.

# VC-25MX2-M/C150I

25 Megapixel High Speed CMOS Digital Camera with CoaXPress 2.0 Interface

**CXP-12**

## Main Features

- High Speed 25 Megapixel CMOS Image Sensor
- CoaXPress 2.0 Interface up to 150.2 fps at 50 Gbps using 4 CH
- Global Shutter CMOS Technology
- DSNU and PRNU Correction
- Flat Field Correction
- Defective Pixel Correction
- GenICam Compatible – XML based Control

## Applications

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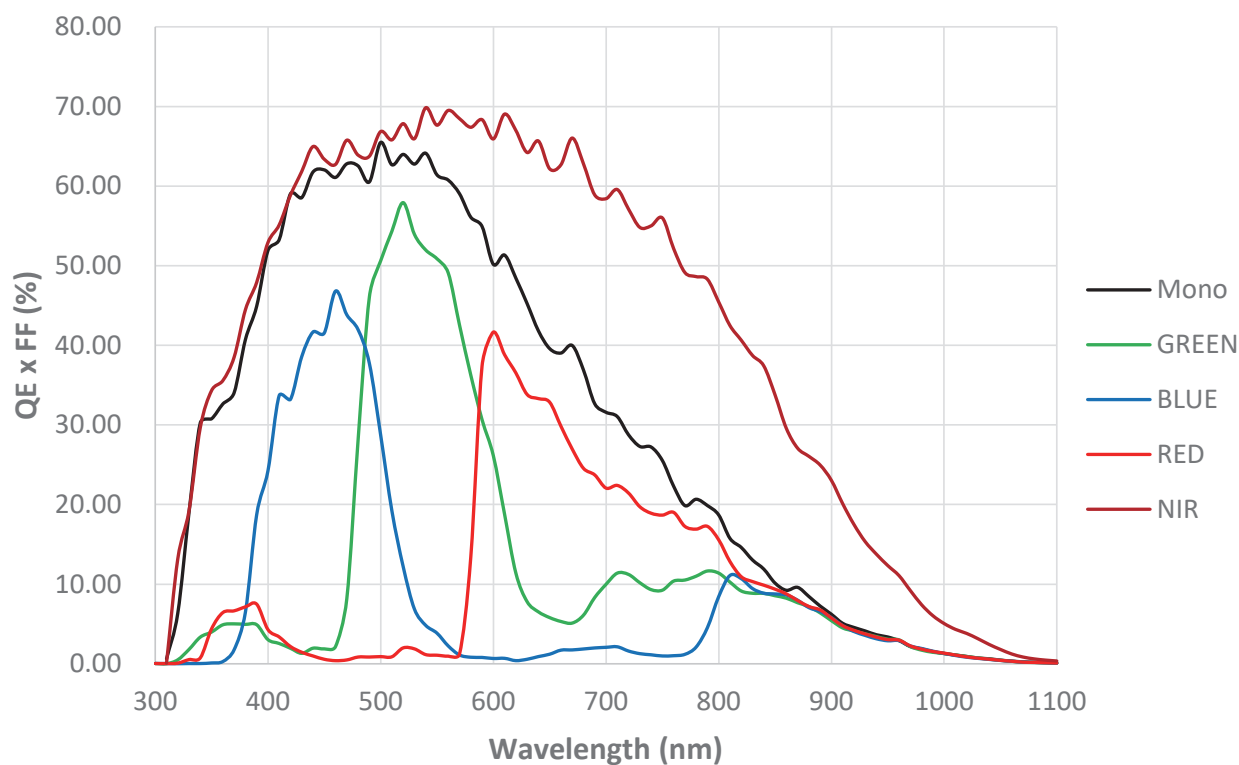- Semiconductor Inspection
- Document / Film Scanning

## Specifications

| Model | | VC-25MX2-M/C150I |
|---|---|---|
| Resolution (H × V) | | 5,120 × 5,120 |
| Sensor | | Gpixel GMAX0505 (Monochrome/Color) |
| | | Gpixel GMAX0505RF (NIR enhanced) |
| Sensor Size (Diagonal) | | 12.8 ㎜ ×12.8 ㎜ (18.1 ㎜) |
| Sensor Type | | High Speed CMOS Image Sensor |
| Pixel Size | | 2.5 ㎛ × 2.5 ㎛ |
| Interface | | CXP-12 × 4 |
| Max. Frame Rate | CXP-6 × 4 | 93.1 fps |
| | CXP-10 × 4 | 145.6 fps |
| | CXP-12 × 4 | 150.2 fps |
| Exposure Time (1 ㎲ step) | | 1 ㎲ – 60 s |
| Partial Scan (Max. Speed) | | 9022 fps at 4 Lines |
| Pixel Data Format | Mono | Mono 8 / Mono 10 |
| | Color | GB Bayer 8 / GB Bayer 10 |
| Electronic Shutter | | Global Shutter |
| Gain Control | | 1× ~ 32× |
| Black Level Control | | 0 – 63 LSB at 10 bit |
| Trigger Synchronization | | Free-Run, Hardware Trigger, Software Trigger or CXP |
| External Trigger | | 3.3 V ~ 24.0 V Logical Level Input, Optically Isolated |
| Software Trigger | | Asynchronous, Programmable via Camera API |
| Dynamic Range | | 61 dB |
| Dimension / Weight | | 80.0 ㎜ × 80.0 ㎜ × 69.4 ㎜, 560 g (C-mount) |
| Temperature | | Operating: 0℃ ~ 40℃, Storage: −40℃ ~ 70℃ |
| Lens Mount | | C-mount, Custom mount available upon request |
| Power | External | 11 ~ 24 V DC |
| | Dissipation | Typ. 14.0 W |
| | PoCXP | 24 V DC, Minimum of two PoCXP cables required |
| Compliance | | CE, FCC, KC |
| API SDK | | Vieworks Imaging Solution 7.X |

## Spectral Response



## Ordering Scheme

VC – 25M X2 – M 150 I

- Series
  VC Series
- Sensor Resolution
  25M – 25 Megapixels
- Interface
  X2 – CoaXPress 2.0
- Mono / Color
  M – Monochrome
  C – Color
- Frame Rate
  150 – 150.2 fps
- Sensor Options
  I – Gpixel CMOS

VC – 25M X2 – M 150 I – NIR

- Series
  VC Series
- Sensor Resolution
  25M – 25 Megapixels
- Interface
  X2 – CoaXPress 2.0
- Mono
  M – Monochrome
- Frame Rate
  150 – 150.2 fps
- Sensor Options
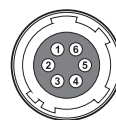  I – Gpixel CMOS
- Sensor Options
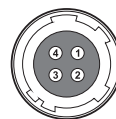  Near InfraRed

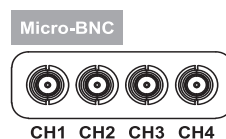## Connector Specification

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

Micro-BNC

CH1: Master Connection
75 Ω, Micro-BNC (HD-BNC)

CH1  CH2  CH3  CH4

Connectors on camera body

## Mechanical Dimensions

Unit: ㎜



80.0$^{+0.08}_{+0.02}$

68.0

4-R3

80.0$^{+0.08}_{+0.02}$

68.0

8-M5 TAP DP 4.5
Camera Mounting Screw Holes

69.4

49.0

17.526 (Optical FB)
18.45 (Mechanical FB)

M25.4 x P0.794
(C-mount Thread)

6.1

55.0

Glass

Image Plane

8.6

8-M5 TAP DP 7
Camera Mounting Screw Holes
(90° Interval)

FAN

PWR

CTRL

CH1  CH2  CH3  CH4

## VISION
### SYSTEMS TECHNOLOGY, LLC