VP-65MX-M/C 31 I

65 Megapixel Thermoelectric Peltier Cooled Camera

CoaXPress®

The VP-65MX-31 I, the latest model of the industrial proven VP series, is a new 65 megapixel CoaXPress camera featuring the latest CMOS image sensor technology (GMAX3265) from Gpixel. The VP-65MX-31 I offers up to 31.6 frames per second at 9344 × 7000 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 image sensor at up to 15 degrees below ambient temperature. This camera provides a stable operating condition and 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 – 15℃ below
- 65 Megapixel Resolution
- CoaXPress Interface up to 31.6 fps at 25 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
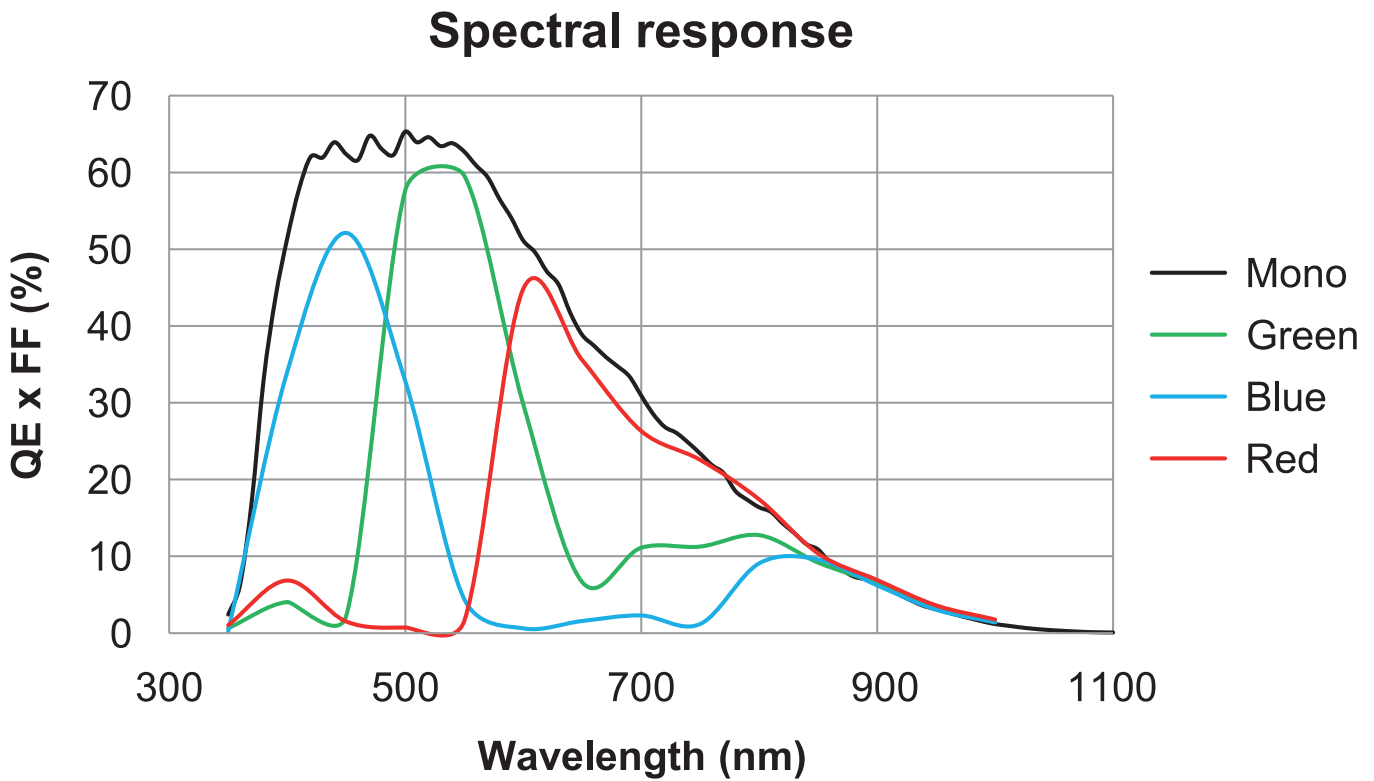- Semiconductor Inspection
- Document / Film Scanning

Specifications

Model		VP-65MX-M/C 31 I
Resolution (H × V)		9344 × 7000
Sensor		Gpixel GMAX3265 – Normal Speed
Sensor Size (Diagonal)		29.9 ㎜ × 22.4 ㎜ (37.4 ㎜)
Pixel Size		3.2 ㎛ × 3.2 ㎛
Interface		CoaXPress
Max. Frame Rate		4 CH: 31.6 fps @ 8 bit
		4 CH: 27.3 fps @ 10 bit
		4 CH: 24.1 fps @ 12 bit
		4 CH: 31.6 fps @ 8 bit 2 × 2 Binning
Exposure Time (1 ㎲ step)		14 ㎲ – 60 s
Partial Scan (Max. Speed)		6349.2 fps at 4 Lines
Binning		2 × 2 Binning
Pixel Data Format	Mono	Mono 8 / Mono 10 / Mono 12
	Color	GB Bayer 8 / GB Bayer 10 / GB 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 ㎃, Logical Level Input, Optically Isolated
Software Trigger		Asynchronous, Programmable via Camera API
Dynamic Range		66 ㏈ @ 12 bit
Gain Control		1× ~ 32×
Black Level Control		0 ~ 255 LSB at 12 bit
Cooling Method		Thermoelectric Peltier Cooling
Cooling Performance		15℃ below ambient temperature – Standard cooling with a fan
Dimension / Weight		90 ㎜ × 90 ㎜ × 145 ㎜, 1,500 g (with F-mount)
Temperature		Operating: 0℃ ~ 40℃, Storage: -40℃ ~ 70℃
Lens Mount		F-mount, Custom mount available upon request
Power	External	11 ~ 24 V DC
	Dissipation	Typ. 26.0 W
Compliance		CE, FCC, KC
API SDK		Vieworks Imaging Solution 7.X

Spectral Response

Spectral response

Ordering Scheme

VP – 65M X – M 31 I

Series
VP Series

Sensor Resolution
65M – 65 Megapixels

Interface
X – CoaXPress

Sensor Options
I – Gpixel CMOS

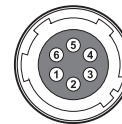Frame Rate
31 – 31.6 fps

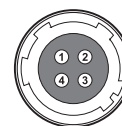Mono / Color
M – Monochrome
C – Color
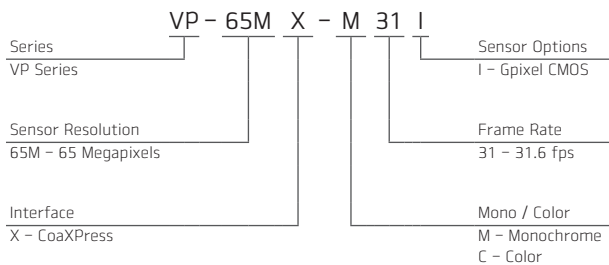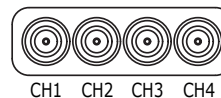
Connector Specification

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   CH2   CH3   CH4

CH1: Master Connection
75 Ω, DIN 1.0/2.3

Connectors on camera body

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Mechanical Dimensions

Unit: ㎜

90.0-0.05 0

90.0-0.05 0

145

46.5 (Optical FB)

47.49±0.2 (Mechanical FB)

11.42

55.0

12.8

Image Plane

8-M5 DP 7
Camera Mounting Screw Holes

PWR   CTRL

CH4
CH3
CH2
CH1

vieworks

D-19-871