

# VP-65MX-M/C 31 I

65 Megapixel Thermoelectric Peltier Cooled Camera



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  $9344 \times 7000$  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.

Pyramid Imaging Inc • 945 East 11th Avenue • Tampa, FL 33605 • +1 813 984 0125 • sales@pyramidimaging.com • pyramidimaging.com



### 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
- GenlCam Compatible XML based Control

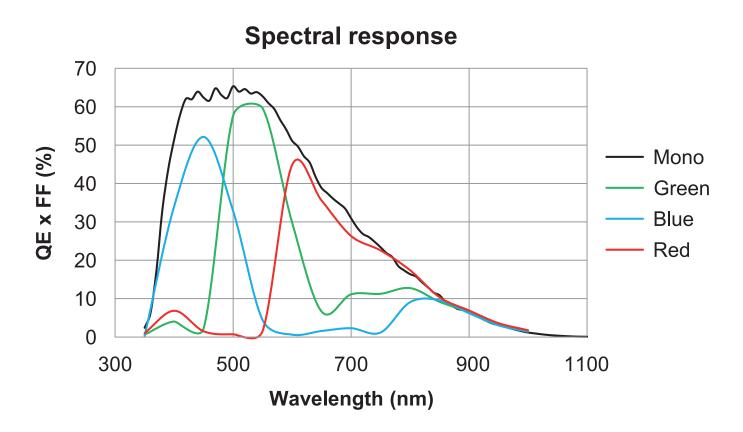
# **Applications**

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

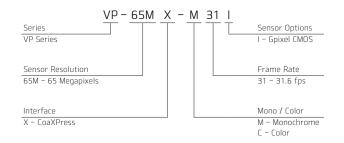
# **Specifications**

Model		VP-65MX-M/C 31 I
Resolution (H $ imes$ V)		9344 × 7000
Sensor		Gpixel GMAX3265 – Normal Speed
Sensor Size (Diagonal)		29.9 mm $\times$ 22.4 mm (37.4 mm)
Pixel Size		$3.2~\mu\mathrm{m}~ imes~3.2~\mu\mathrm{m}$
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 $ imes$ 2 Binning
Exposure Time (1 $\mu$ s step)		14 μs - 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 mA, Logical Level Input, Optically Isolated
Software Trigger		Asynchronous, Programmable via Camera API
Dynamic Range		66 dB @ 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 mm $ imes$ 90 mm $ imes$ 145 mm, 1,500 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. 26.0 W
Compliance		CE, FCC, KC (in preparation)
API SDK		Vieworks Imaging Solution 7.X

## **Spectral Response**



# **Ordering Scheme**



# **Connector Specification**



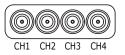
1, 2, 3: +12V DC 4, 5, 6: GND (HR10A-7R-6PB)

Control



- 1: Trigger IN+ 2: Trigger IN-3: Strobe Out-(GND)
- 4: Strobe Out+ (HR10A-7R-4S)

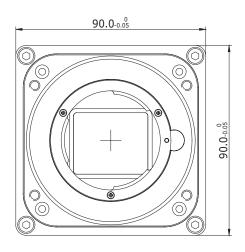
Data Transfer / Communications

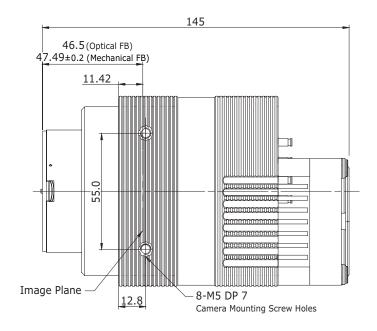


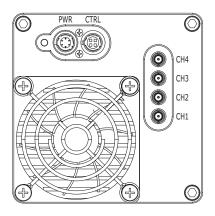
CH1: Master Connection 75  $\Omega$ , DIN 1.0/2.3

#### **Mechanical Dimensions**

Unit: mm









945 East 11th Avenue Tampa, FL 33605

Phone: (813) 984-0125

Contact: Sales@ pyramidimaging.com

https://pyramidimaging.com

