

---

# VP-25MC-M/C 30

25 MEGAPIXEL THERMOELECTRIC PELTIER COOLED CAMERA



The VP-25MC camera, the latest member of the industrial proven VP series, is a 25 megapixel resolution CMOS camera with the Camera Link interface. It features 25 megapixel resolutions with frame rate up to 30 fps. 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 about 17 degrees below ambient temperature. This camera provides a stable operating condition or 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.

# VP-25MC

25 MEGAPIXEL THERMOELECTRIC PELTIER COOLED CAMERA

## Main Features

- \* 25 Megapixel Resolution (ON Semiconductor)
- \* Thermoelectric Peltier Cooling
  - about 17 degrees below ambient temperature
- \* Minimizing the number of hot pixels with TEC (up to 99%)
- \* Camera Link Full Interface
- \* Pixel Defect Correction
- \* Flat Field Correction
- \* Field Upgradable Firmware

## Applications

- \* Flat Panel Display Inspection
- \* Research and Scientific Imaging
- \* Machine Vision Inspection
- \* Microscopy and Metrology

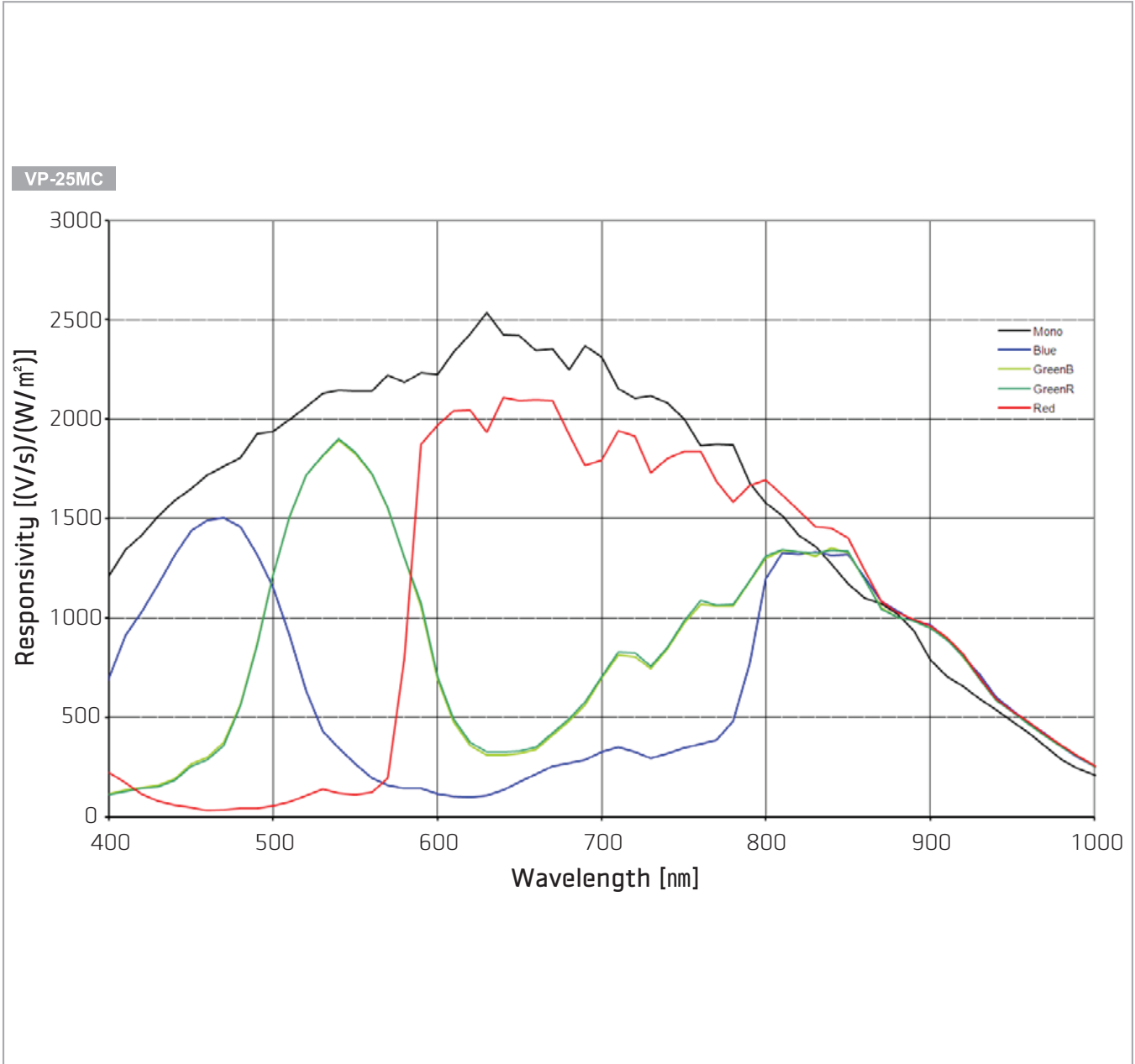
## Specifications

Model	VP-25MC-30
Resolution (H × V)	5120 × 5120
Sensor	ON Semiconductor VITA-25K
Sensor Size (Optical Format)	35 mm
Sensor Type	High Speed CMOS Image Sensor
Pixel Size	4.5 μm × 4.5 μm
Interface	Camera Link Full
Max. Frame Rate	8 Tap: 25.0 fps 10 Tap: 30.9 fps
Transfer Time	8 Tap: 40.00 ms 10 Tap: 32.36 ms
Exposure Time	1/100,000 – 7 s
Pixel Data Format	8 bit (8/10 Tap), 10 bit (8 Tap)
Data Output Pixel Clock	85 MHz
Electronic Shutter	Global Shutter
Binning	1× and 2×
Trigger Mode	Free-Run, Trigger Programmable Exposure Time and Trigger Polarity
Dynamic Range	54 dB
Cooling Method	Thermoelectric Peltier Cooling
Cooling Performance	17°C below ambient temperature / Standard cooling with a fan
Dimension / Weight	90 mm × 90 mm × 134 mm, 1,500 g (with F-mount)
Temperature	Operating: -5°C ~ 40°C, Storage: -40°C ~ 70°C
Lens Mount	F-mount or Custom mount available upon request
Power	10~24 V DC, Typ. 22 W
Compliance	CE, FCC, KC
Configuration SW	Configurator

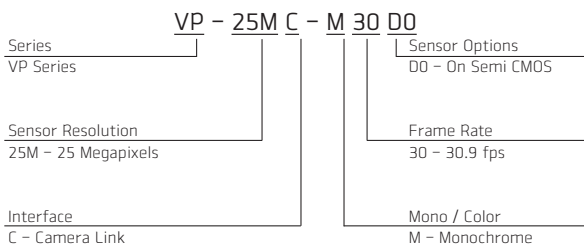
# VP-25MC

25 MEGAPIXEL THERMOELECTRIC PELTIER COOLED CAMERA

## Quantum Efficiency Curves

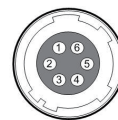


## Ordering Scheme



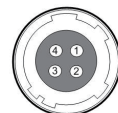
## Connector Specification

Power



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

Control



1: Trigger IN+, 2: Trigger IN-  
3: DC Ground, 4: Strobe OUT+  
(HR10A-7R-4S)

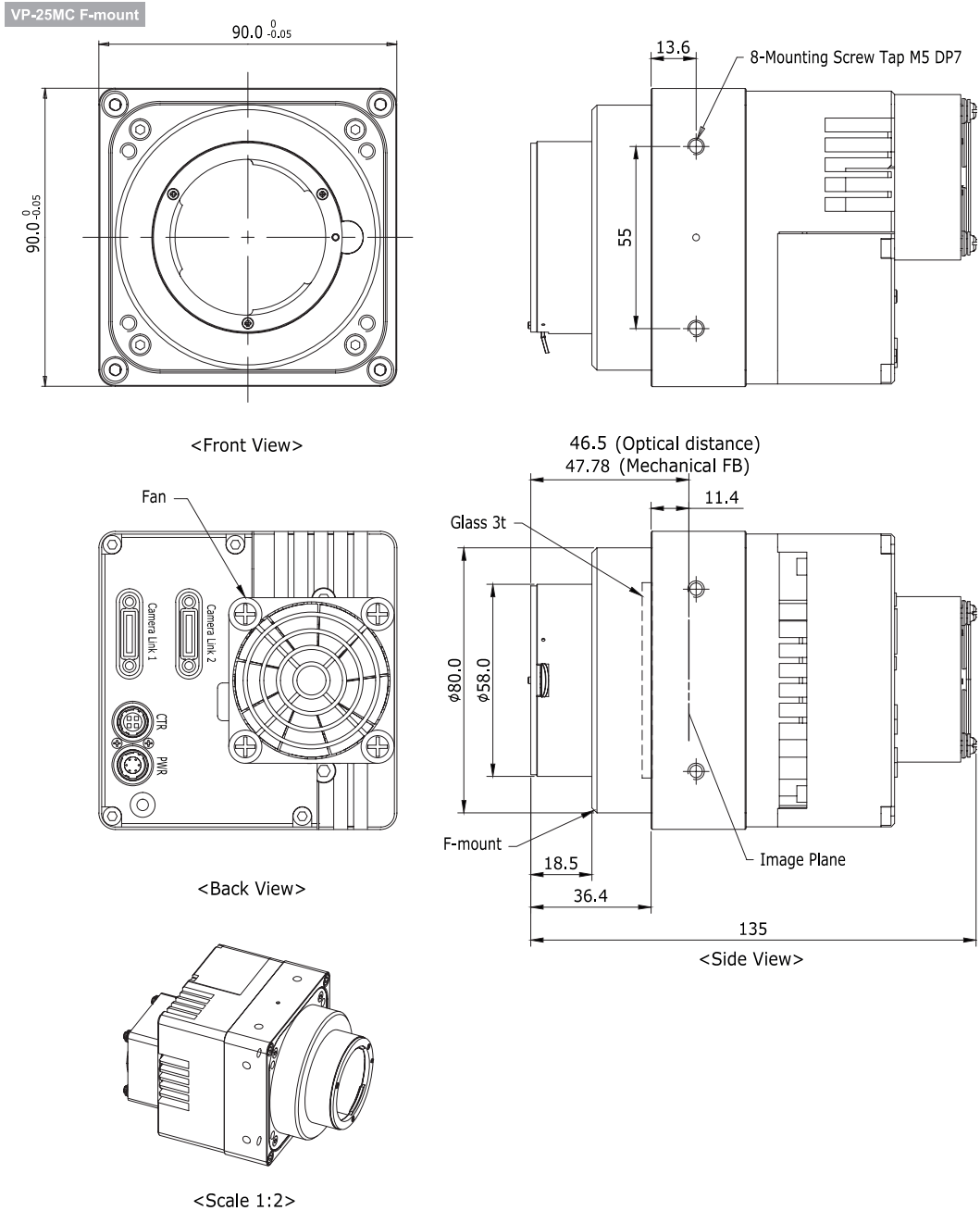
Connectors on camera body

# VP-25MC

25 MEGAPIXEL THERMOELECTRIC PELTIER COOLED CAMERA

## Mechanical Dimensions

Unit: mm



Reproduction in whole or in part without written permission is prohibited. Pyramid Imaging 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-17-613

