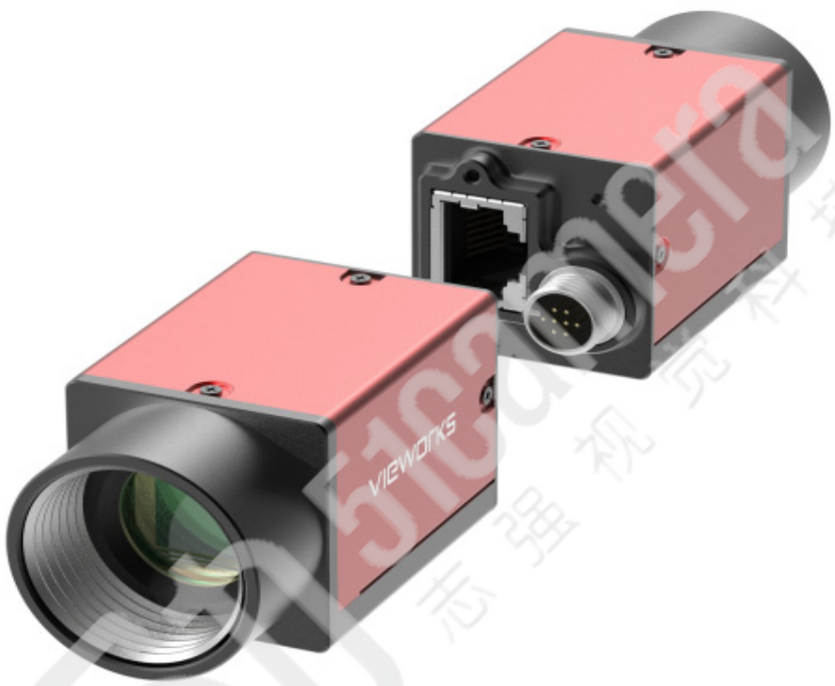
Preliminary

VZ-5MG-M23C00-NIR

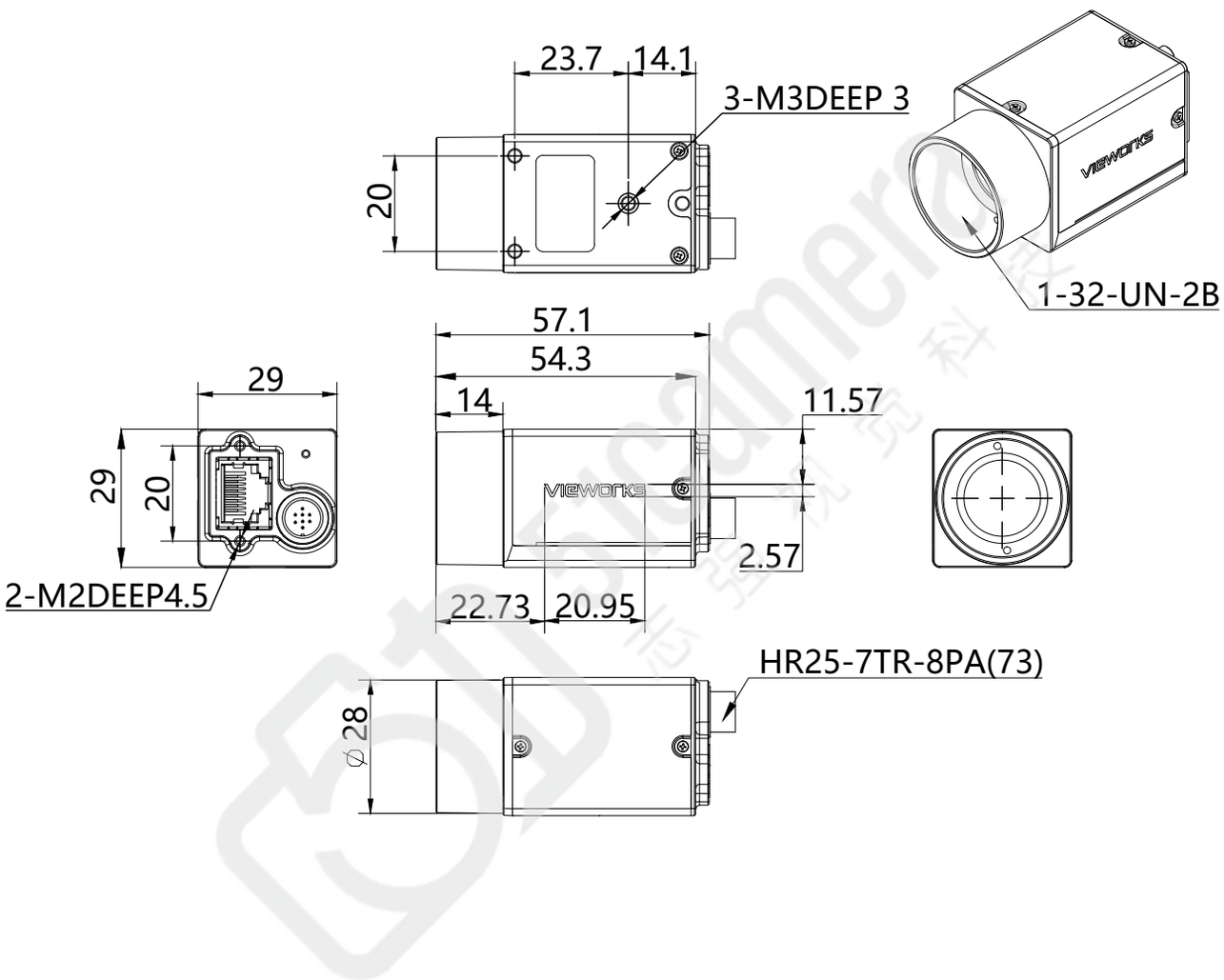
Industrial Digital Cameras with NIR enhanced GigE Interface



VZ-5MG-M23C00-NIR is the NIR enhanced GigE Vision camera with the Onsemi AR0522 CMOS sensor,the sensor has optimized response in the near-infrared band.
Thanks to the compact design(29㎜ x 29㎜ x 40.3㎜), robust metal housings and locking screw connectors, the VZ-5MG-M23C00-NIR camera can secure the reliability of cameras deployed in harsh environments. The VZ-5MG-M23C00-NIR camera has opto-isolated I/Os. The GPIOs give the camera maximum flexibility to adapt to specific needs.
The VZ-5MG-M23C00-NIR camera is especially suitable for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

Mechanical Dimensions

Unit: mm



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VZ-5MG-M23C00-NIR

Industrial Digital Camera with NIR enahnced GigE Interface

Main Features

- Power over Ethernet (IEEE802.3af)
- Programmable ROI, increased frame rate with partial scan
- Programmable LUTs and storable user sets
- Supports Binning,Decimation, Digital Shift, Noise Reduction and Dynamic Defect Pixel correction
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Adjustable packet-size and packet-delay,and reserved bandwidth
- Support Remove Parameter Limit to expand the range of exposure, gain, and so on
- Compatible with GenICam™ and GigE Vision®

Applications

- Industrial Inspection
- Medical Research
- Scientific Research
- Education
- Security

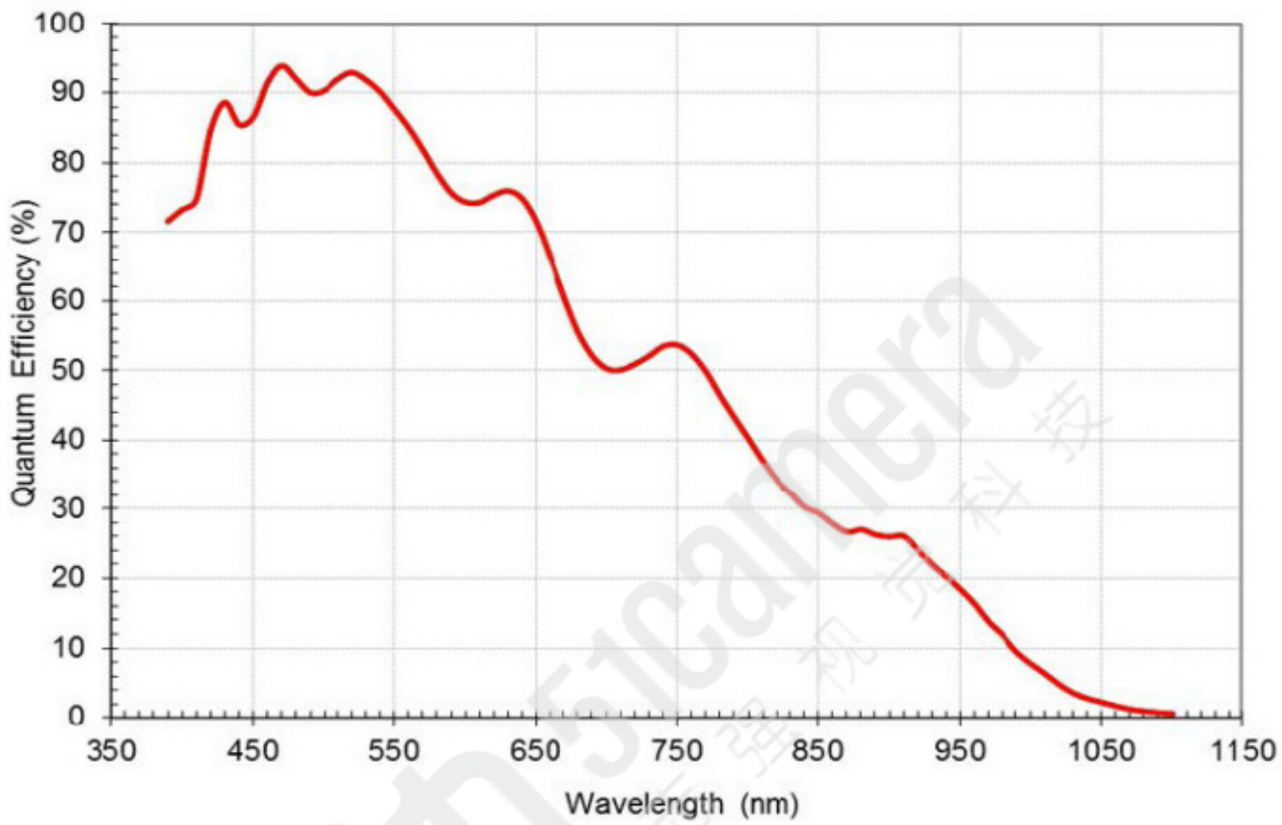
Specifcations

Model	VZ-5MG-M23C00-NIR
Resolution (H x V)	2592 x 1944
Sensor	Onsemi AR0522 rolling shutter CMOS
Pixel Size	2.2 μm × 2.2 μm
Data Interface	Fast Ethernet (100 Mbit/s) or Gigabit Ethernet (1000 Mbit/s)
Frame Rate	23.3 fps @2592 × 1944 (Adjust the packet size to 8192 and reserved bandwidth to 5)
ADC Bit Depth	12bit
Pixel Bit Depth	8 bit, 12 bit
Exposure Time	Standard: 20 μs to 1 s, Actual Steps: 1 row period
Gain	0 dB to 23.6 dB, Default: 0 dB, Steps: 0.1 dB
Mono / Color	Mono NIR
Pixel Formats	Mono 8 bit and Mono 12 bit
Signal Noise Ratio	40.2dB
Synchronization	Hardware trigger and Software trigger
I/O	1 input and 1 output with opto-isolated, 2 programmable GPIOs
Temperature	Operating: 0℃ to 45℃, Storage: -20℃ to 70℃
Operating Humidity	10% to 80%
Power Requirements	12 to 24 VDC via 8-Pin or PoE
Power Consumption	< 3 W @ 24 VDC, < 3.75 W @ PoE
Lens Mount	C
Dimensions and Weight	29mm x 29mm x 40.3mm, 85g
Programmable Control	Image size, gain, exposure time, trigger polarity, flash polarity
Conformity	CE, FCC, RoHS, GenICam, GigE Vision

VZ-5MG-M23C00-NIR

Industrial Digital Camera with NIR enahnced GigE Interface

Spectral Response



Ordering Scheme

VZ – 5MG – M23C00 NIR

Series
VZ Series

Resolution and Interface
5M – 2592 x 1944

G – Gigabit Ethernet

Frame Rate
23 – 23fps
NIR
(Near Infrared)

Mono / Color
M – Mono
Sensor
C – Onsemi CMOS

Connector Specification

Power/Control

1: Line0+	Opto-isolated input+
2: Ground	GND & GPIO GND
3: Line0-	Opto-isolated input-
4: POWER_IN	Camera external power (+12 VDC ~ +24 VDC)
5: Line2	GPIO input/output
6: Line3	GPIO input/output
7: Line1-	Opto-isolated input-
8: Line1+	Opto-isolated input+

Connectors on camera body