ME2P-530-72U3M NIR

MERCURY2 Plus Series 5.3MP CMOS USB3.0 Area Scan Camera

The ME2P-530-72U3M NIR camera is a NIR USB3.0 Vision camera with the Onsemi PYTHON 5000 CMOS sensor. The ME2P-530-72U3M NIR camera has opto-isolated I/Os that adapt to specific needs. Four-side mounting holes provide maximum installation flexibility for ME2P-U3. Thanks to the extremely compact (36mm × 31mm × 38.8mm), robust metal housings and locking screw connectors, the MERCURY2 Plus cameras can secure the reliability of cameras deployed in harsh environments.

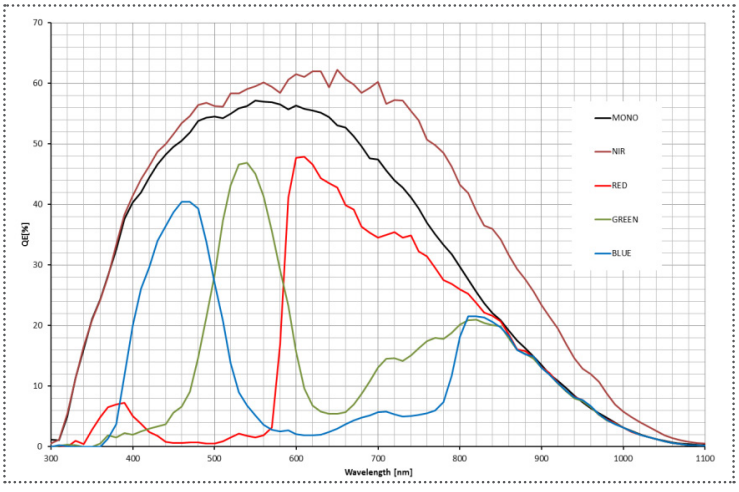
Applications

Suitable for machine vision applications such as industrial inspection, medical, scientific research, education and so on.

Features

- Gamma, Binning, Decimation, Digital Shift, Black Level
- Defect Pixel Correction, Flat Field Correction
- Noise Reduction, Sharpness
- Timer, Counter, LUT, User Set Control
- Support Remove Parameter Limit to expand the range of exposure, gain, and so on
- 16KB data storage area for saving algorithm coefficients and parameter configuration

Spectral Response



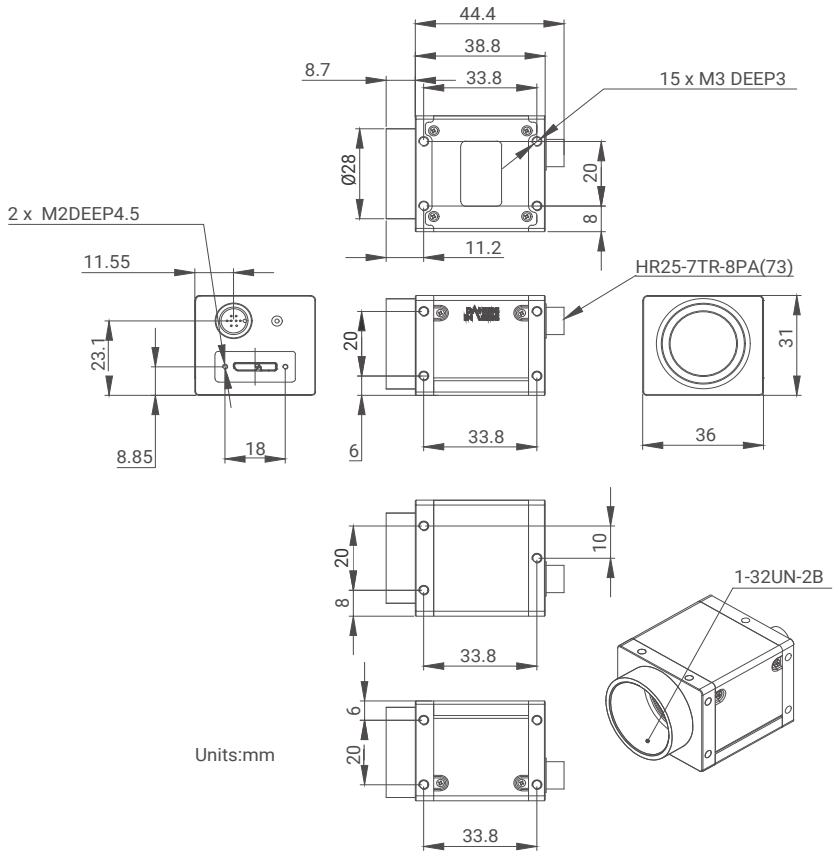
Specifications

Model	ME2P-530-72U3M NIR
Resolution	2592(H) × 2048(V)
Sensor	Onsemi PYTHON 5000 Global shutter CMOS
Sensor Format	1"
Pixel Size	4.8μm × 4.8μm
Frame Rate	72.4 fps
ADC	12 bit
Pixel Bit Depth	8 bit, 10 bit
Mono/Color	Mono, NIR
Pixel Formats	Mono8 / Mono10
SNR	40.3 dB
Exposure Time	Standard: 20μs ~ 100ms, Actual Steps: 1 row period
Gain	0dB ~ 16dB; Default: 0dB, Steps: 0.1dB
Binning	1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4
Decimation	Sensor: 1×1, 1×2, 2×1, 2×2
Synchronization	Hardware trigger, software trigger
Acquisition Mode	Single frame, Continuous, Software trigger, Hardware trigger
Reverse X/Y	Reverse X/Y
I/O Interface	1 input and 1 output with opto-isolated, 2 programmable GPIOs
Data Interface	USB3.0
Power Supply	Power over USB3.0
Typical Power	3.25 W @ 5 VDC
Operating Temp.	0°C ~ +45°C
Storage Temp.	-20°C ~ +70°C
Operating Humidity	10% ~ 80%
Lens Mount	C / CS
Dimensions	36(W) × 31(H) × 38.8(L) mm (without lens adapter or connectors)
Weight	66 g
Software	3rd-party software such as HALCON, MERLIC and LabVIEW
OS	32bit / 64bit Windows, Linux, Android, ARMv7, ARMv8
Conformity	CE, RoHS, FCC, ICES, UKCA, USB3.0 Vision®, GenICam®

I/O Interface

Pin	Definition	Description
1	Line 0+	Opto-isolated input +
2	GND	GPIO GND
3	Line 0-	Opto-isolated input -
4	NC	NC
5	Line 2	GPIO input/output
6	Line 3	GPIO input/output
7	Line 1-	Opto-isolated output -
8	Line 1+	Opto-isolated output +

Technical Drawing



China Daheng Group, Inc. Beijing Image Vision Technology Branch

12F Daheng Science & Technology Tower, No.3 Suzhou Street, Haidian District, Beijing China, 100080
Tel: +86 10 82828878
E-mail: isales@daheng-imaging.com