MERCURY2 SERIES

MER2-503-23GM-P POL

- Minimal exposure time mode
- 5.0 Megapixels
- 2/3" global shutter CMOS sensor
- Ultra small, light and robust
- Compatible with GenICam™ and GigE Vision®
- Polarization camera
- Power over Ethernet (PoE)
- 2 programmable GPIOs

GigE VISION GEN<i>CAM CE RoHS

The MERCURY2 GigE PoE series (MER2-G-P) camera is DAHENG IMAGING's new generation area scan industrial digital camera, featuring outstanding performance, compact design and extremely low noise.

The MER2-503-23GM-P POL camera is a polarization camera with the Sony IMX264MZR CMOS sensor, and capture image of four different light directions simultaneously. Polarization camera can inspect reflective surface such as glass, metal which are difficult for monochrome or color camera. Thanks to the extremely compact, robust metal housings and locking screw connectors, the MERCURY cameras can secure the reliability of cameras deployed in harsh environments.

The MER2-503-23GM-P POL camera is powered over the GigE interface and has opto-isolated I/Os. The GPIOs give MER2-G maximum flexibility to adapt to specific needs. The camera has an outstanding price/performance ratio.

The MERCURY2 family cameras are especially suitable for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

Features

- Power over Ethernet (IEEE802.3af compliant)
- Gain and exposure
- Support auto gain and auto exposure
- Four acquisition controls: Single frame acquisition / Continuous acquisition / Software trigger acquisition / External trigger acquisition
- Trigger mode: Frame Start /Frame Burst Start
- Two exposure time modes: standard exposure time mode / minimal exposure time mode
- Support Decimation, Binning, Digital Shift and Black Level
- Support Reverse X/Y(horizontal and vertical mirroring)
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Programmable LUTs and storable user sets
- Support Timer and Counter
- Support Remove Parameter Limit to expand the range of exposure, gain, and so on
- Adjustable packet-size and packet-delay, and reserved bandwidth
- 16KB data storage area for saving algorithm coefficients and parameter configuration
- Compatible with GenICam™ and GigE Vision®, can be used in a wide range of 3rd-party software such as HALCON, MERLIC and LabVIEW directly
- Optimized software package for 32/64bit Windows, and support Linux, ARMv7, ARMv8 and Mac OS
- Multiple samples and easy-to-integrate SDKs for various programming tools
- Regulations: CE, RoHS, GenICam, GigE Vision, IEEE802.3af (PoE)

Performance Specifications

Model	MER2-503-23GM-P POL
Interface	GigE
Resolution	2448(H) × 2048(V)
Frame rate	23.5 fps @2448 × 2048
Sensor	2/3" Sony IMX264MZR Global shutter CMOS
Pixel size	3.45 μm × 3.45 μm
Pixel Bit Depth	8bit, 10bit
Spectrum	Monochrome
Exposure time	20μs~1s
Minimal exposure time	1μs~100μs

Optical Specifications

Lens mount	C-Mount (standard), CS-Mount (optional)

Electrical Specifications

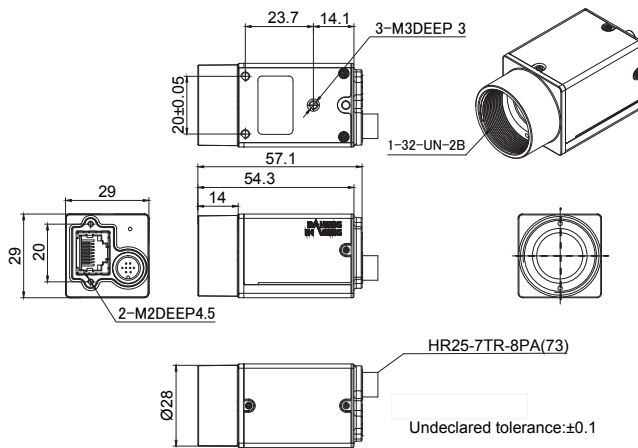| Power requirement	12~24 VDC via 8-Pin or PoE
I/Os	1 input / 1 output, 2 GPIOs
Data interface	RJ45
Power consumption	<3W @24VDC

Environmental Specifications

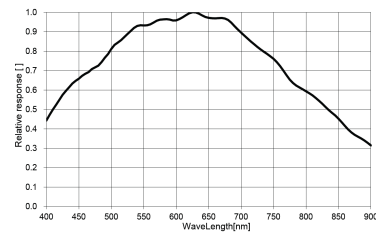| Operating temp.	0°C ~ +45°C
Storage temp.	-20°C ~ +70°C
Operating humidity	10% ~ 80%

Mechanical Specifications

Weight	75g
Dimensions	29x29x40.3mm, w/o adapter & connectors

Technical Drawing

Units: mm

Spectral Response

MER2-503-23GM-P POL

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