

# MERCURY SERIES

## MER-310-12UC



GEN*i*CAM



- Ultra small, light and robust
- 1/2" Rolling Shutter CMOS sensor
- Compatible with GenICam™
- USB2.0 Interface
- 3.1 Megapixels
- Very attractive price

The MERCURY USB2.0 series(MER-U) camera is DAHENG IMAGING's mature area scan industrial digital camera, featuring outstanding performance, compact design and extremely low noise.

The MER-310-12UC camera is a color USB camera with the Onsemi MT9T001 CMOS sensor. Thanks to the extremely compact (29mm × 29mm × 29mm), robust metal housings and locking screw connectors. The MERCURY cameras can secure the reliability of cameras deployed in harsh environments.

The MER-310-12UC camera is powered over the USB interface. The MER-310-12UC camera has opto-isolated I/Os. The I/Os give MER-U maximum flexibility to adapt to specific needs. The camera has an outstanding price/performance ratio.

The MERCURY USB2.0 Series camera is especially suitable for machine vision applications such as surface inspection, alignment, defect detection, measurement, OCR, bar code and data code identification and so on. They are also suitable for desktop applications, such as microscope and documents imaging.

### Features

- Programmable ROI (region of interest), increased frame rate with partial scan
- Gain, exposure and white balance programmable (white balance only for color models)
- Support auto gain, auto exposure and auto white balance (auto white balance only for color models)
- Three acquisition controls: Continuous acquisition/Software trigger acquisition/ External trigger acquisition
- Flash sync for firing external lights at precisely the moment when exposure is performed
- Programmable acquisition speed level, optimize multi-cameras work simultaneity
- Built-in encryption circuitry
- Robust full metal housing and optional lockable devices
- Hot plugging available
- 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
- Multiple samples and easy-to-integrate SDK for various programming tools
- Regulations: CE, RoHS, GenICam

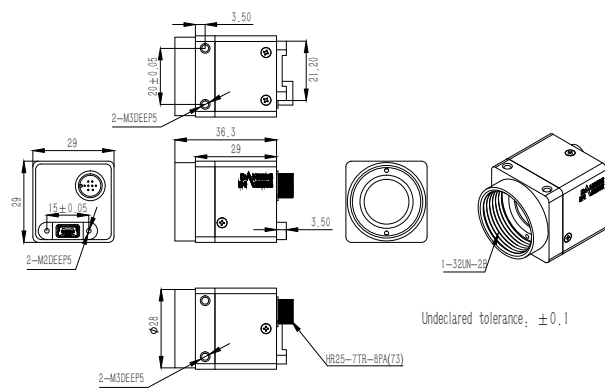
### Performance Specifications

Model	MER-310-12UC
Interface	USB2.0
Resolution	2048(H) × 1536(V)
Frame rate	12 fps
Sensor	1/2", Rolling Shutter Onsemi MT9T001 CMOS
Pixel size	3.2 μm × 3.2 μm
Pixel Bit Depth	8bit, 10bit
Spectrum	Color
Exposure time	151μs~1s

### Optical Specifications

Lens mount	C-Mount (standard), CS-Mount (optional)
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### Technical Drawing



Units: mm

### Electrical Specifications

Power requirement	5 VDC via USB cable
I/Os	1 input / 1 output
Data interface	Mini B
Power consumption	<1W @5V DC

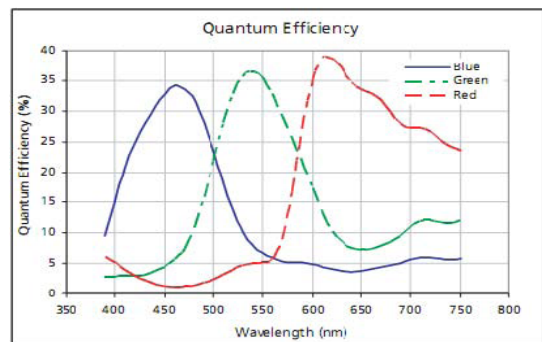
### Environmental Specifications

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

### Mechanical Specifications

Weight	42g
Dimensions	29(W)x29(H)x29(L)mm, w/o connectors

### Spectral Response



MER-310-12UC

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Specifications are subject to change without prior notice.

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