

## Mini USB Cameras

### DH-HV-U-ML series

Digital cameras in DH-HV-U-M-L series targeted for industrial applications are equipped with rolling shutter CMOS sensors and USB 2.0 interfaces. For the users who do not require IO control function, the DH-HV-U-ML series camera which has an ultra-compact housing is a better choice. Optional mechanical parts designed for locking cables firmly are also available to secure the reliability of cameras deployed in harsh environments.



- Compact and robust design
- CMOS sensor, rolling shutter
- 1.3 to 5 Megapixels
- Very economical price

#### DH-HV-Ux-ML

Model	Interface	Resolution(H×V)	Frame Rate	Sensor	Pixel Size	Spectrum
DH-HV1351UC/UM-ML	Mini USB 2.0	1280×1024	15	1/1.8" progressive CMOS	5.2μm × 5.2μm	COLOR/MONO
DH-HV2051UC-ML	Mini USB 2.0	1600×1200	10	1/2" progressive CMOS	4.2μm × 4.2μm	COLOR
DH-HV3151UC-ML	Mini USB 2.0	2048×1536	6	1/2" progressive CMOS	3.2μm × 3.2μm	COLOR
DH-HV5051UC/UM-ML	Mini USB 2.0	2592×1944	8	1/2.5" progressive CMOS	2.2μm × 2.2μm	COLOR/MONO

### Features

- Mini USB 2.0 interface with 12 or 8-bit Bayer/Mono output
- Programmable AOI (area of interest), increased frame rate with partial scan
- Gain and exposure control
- Diverse manners of acquisition controls:
  - Continuous acquisition
  - Software trigger acquisition
- Programmable acquisition speed level, optimize multi-cameras work simultaneity (DH-HV5051UC/UM-ML only)
- Support color correction for improve image quality (DH-HV5051UC/UM-ML only)
- Skipping and binning mode (DH-HV5051UC/UM-ML only)
- Built-in encryption circuitry
- Robust full metal housing and optional lockable devices
- Hot plugging available
- Compatible with a wide range of 3rd-party software such as HALCON and LABVIEW
- Optimized software package for lower CPU loads in host running 32/64bit Windows
- Free SDK and examples for various programming tools

### Mechanical Specifications

Weight	80g ±5
Dimension	DH-HV1351UC/UM-ML 32 × 38 × 38 mm, DH-HV2051UC-ML without lens adapter HV3151UC-ML and connectors DH-HV5051UC/UM-M 30 × 38 × 38 mm,

### Electrical Specifications

Power requirement	DC 5 V via USB cable
Opto-coupled I/Os	-
Data interface	USB Mini-B
Power consumption	DH-HV1351UC/UM-ML Type 1.75W (@ 5V DC) ; DH-HV2051UC-ML Max 2.25W (@ 5V DC)

without lens adapter  
and connectors

HV3151UC-ML

DH-HV5051UC/UM-ML Type <1W (@ 5V DC)

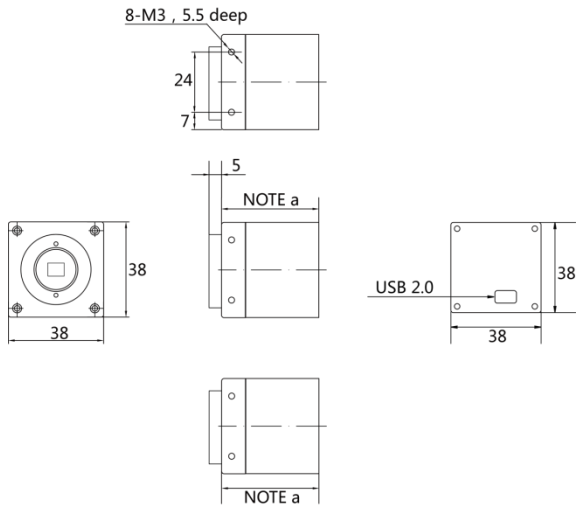
Body material AL12

## Environmental Specifications

Operating temperature 0°C ~ +60°C

Operating humidity 10% ~ 80%

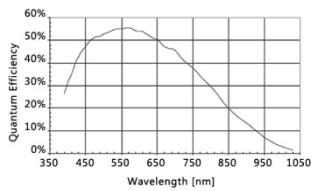
## Dimensions



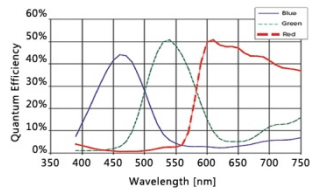
Note a: DH-HV1351UC/UM-ML, DH-HV2051UC-ML, HV3151UC-ML: 32

DH-HV5051UC/UM-ML: 30

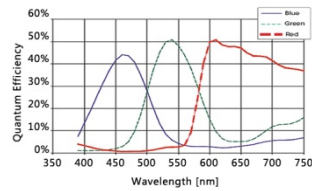
## Sensor Response



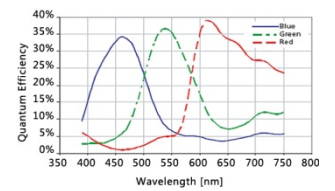
DH-HV1351UM-ML



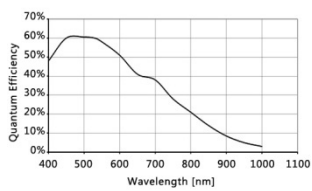
DH-HV1351UC-ML



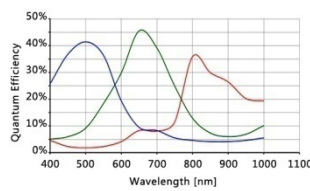
DH-HV2051UC-ML



DH-HV3151UC-ML



DH-HV5051UM-ML



DH-HV5051UC-ML