

# WAT-03U2

1/3" Compact High Sensitivity USB2.0 HD Color Camera

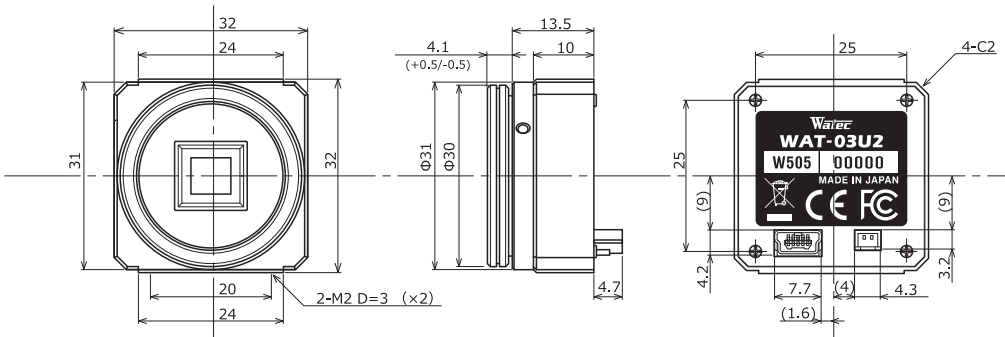
Directly import the captured image to your PC and compact design specializes in the embedded application



## Key features

- High sensitivity 1.3 M CMOS sensor
- Min. illumination 0.02 lx F1.2 (AGC ON=42dB, Shutter=OFF)  
0.005 lx F1.2 (AGC ON=42dB, Shutter=1/7.5 sec.)
- Frame rate : 30fps (HD)、60fps (VGA)
- USB Video Class & USB Bus Power (plug & play)

## Dimensions

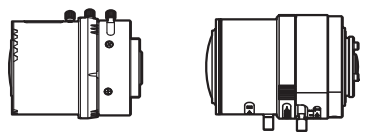


## Specifications

|                                   |   |  |
|-----------------------------------|---|--|
| Pick-up element                   | 1/3 inch CMOS image sensor  |  |
| Number of effective pixels        | 1305(H) × 977(V)  |  |
| Unit cell size                    | 3.75μm(H) × 3.75μm(V)   |  |
| Imaging system                    | RGB primary color bayer arrangement mosaic filters on chip                                    |  |
| Synchronizing system              | Internal  |  |
| Scanning system                   | Progressive   |  |
| Output size                       | 1280×960, 1280×720, 640×480, 320×240  |  |
| Max. frame rate                   | 60 fps  |  |
| Video compression                 | MJPEG, YUY2   |  |
| Video output                      | USB Video Class (Compatible)  |  |
| Minimum illumination              | 0.02 lx F1.2 (AGC ON=42dB, Shutter=OFF)   |  |
|                                   | 0.005 lx F1.2 (AGC ON=42dB, Shutter=1/7.5 sec.)   |  |
| S/N                               | -   |  |
| Function settings                 | Camera Viewer   |  |
| AE mode                           | Fixed   | 1/15, 1/7.5, 1/4, 1/2, 1, 2 sec.                                     |
|                                   | EI  | 1/30, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000 sec. |
| White balance                     | ATW, MWB  |  |
|                                   | AGC   | ON   |
|                                   | OFF   | -  |
| MGC                               | 0 - 72dB (1dB step)   |  |
| Gamma characteristics             | γ=USER (Level adjustable)   |  |
| Noise reduction                   | -   |  |
| Wide dynamic range                | -   |  |
| Lens iris                         | -   |  |
| Back light compensation           | BLC   |  |
| White blemish correction          | -   |  |
| Sharpness                         | Level adjustable  |  |
| Defog                             | -   |  |
| Digital zoom                      | -   |  |
| Privacy mask                      | -   |  |
| Mirror image                      | -   |  |
| Freeze                            | -   |  |
| Motion detection                  | -   |  |
| Neg.image                         | -   |  |
| Interface                         | USB (High speed), 2P connector (Snap shot)  |  |
| Power supply                      | USB +5V   |  |
| Power consumption                 | 0.75W (150mA)   |  |
| Operating temperature             | -10 - +50°C   |  |
| Storage temperature               | -30 - +70°C   |  |
| Operating / Storage humidity      | 95% RH or less (Without condensation)   |  |
| Lens mount                        | CS mount (Back focus adjustable)  |  |
| Cable length                      | Shorter than 3.0m recommended   |  |
| Weight                            | Approx. 35g   |  |
| Accessories                       | Hex. Wrench, Camera bracket, EX cable, USB cable  |  |
| Min. System Requirements          | CPU   | 800MHz or faster   |
|                                   | RAM   | 512MB or larger  |
|                                   | Others  | USB2.0 Port  |
| Recommended System Specifications | CPU   | Intel® Core TM i Series  |
|                                   | RAM   | 2GB or larger  |
|                                   | Others  | USB2.0 Port, 1920×1080 or better resolution display                  |
| Operation Confirmed OS            | Windows 7 32bit/64bit, Windows 8 32bit/64bit, Windows 8.1 32bit/64bit, Windows 10 32bit/64bit |  |

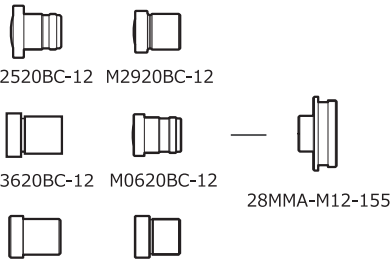
Accessories Options

**CS-mount lenses**



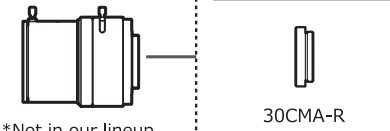
M13VM288IR A4Z2812CS-MPIR

**Miniature lenses / Mount adaptors**



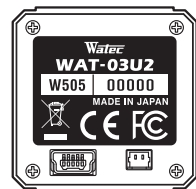
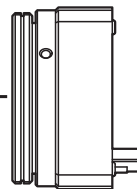
M2520BC-12 M2920BC-12  
M3620BC-12 M0620BC-12 28MMA-M12-155  
M0816BC-12 M1625BC-12

**C-mount lenses**



\*Not in our lineup  
30CMA-R

**WAT-03U2**

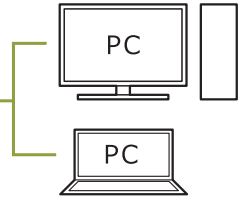
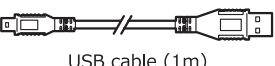


**GPIO**



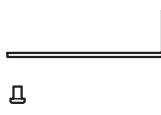
Snap shot  
EX cable (300mm)

**USB cable (1m)**



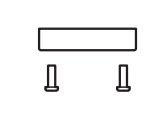
\*Watec Camera Viewer recommended  
Download from Watec website

**Holder**




H003

**Camera bracket**



B005

**Stand**



MS50