

# WAT-07U2

1/2.8" Compact High Sensitivity USB2.0 Full HD B&W Camera

Added B&W version to the USB camera series

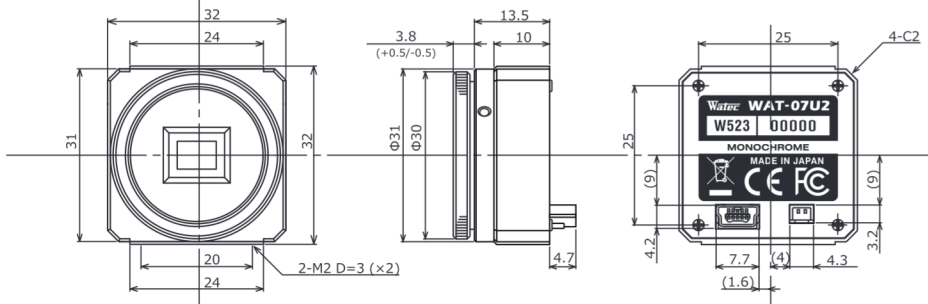
**NEW**



## Key features

- Directly import the image to your PC and compact design specializes in the embedded application
- Min. illumination 0.002 lx F1.4 (AGC ON=36dB, Shutter=OFF)  
0.0005 lx F1.2 (AGC ON=36dB, Shutter=1/7.5 sec.)
- The internal ISP (Image Signal Processor) enables optimal image quality for your usage
- Simple viewer software with features to change the camera settings and capture images

## Dimensions



## Specifications

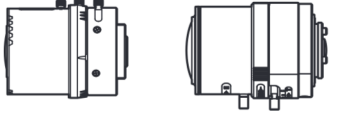
Pick-up element	1/2.8 inch CMOS image sensor	
Number of effective pixels	1945(H) × 1097(V)	
Unit cell size	2.9µm(H) × 2.9µm(V)	
Imaging system	-	
Synchronizing system	Internal	
Scanning system	Progressive	
Output size	1920x1080, 1280x720, 640x480, 320x240	
Max. frame rate	30 fps	
Video compression	MJPEG, YUY2	
Video output	USB Video Class (Compatible)	
Resolution (H)	More than 800TVL (Center)	
Minimum illumination	0.002 lx F1.4 (AGC ON=36dB, Shutter=OFF) 0.0005 lx F1.4 (AGC ON=36dB, Shutter=1/7.5 sec.)	
S/N	-	
Function settings	Camera Viewer	
AE mode	Fixed	1/15, 1/7.5, 1/4 sec.
	EI	1/30, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000 sec. 1/30 - 1/8000 sec. 1/7.5 - 1/8000 sec.
White balance	-	
AGC	ON	0 - 36dB
	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	x1, x1.38, x2.25 *1	x1, x1.2, x1.5 *2
Privacy mask	-	
Mirror image	-	
Freeze	-	
Motion detection	-	
Neg.image	-	
Interface	USB (High speed), 2P connector (Snap shot)	
Power supply	USB +5V	
Power consumption	0.65W (130mA)	
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	
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 10 32bit/64bit	

\*1: Output format: 640x480 \*2: Output format: 1280x720

Accessories Options


### WAT-07U2

**CS-mount lenses**



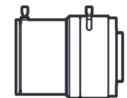
M13VM288IR A4Z2812CS-MPIR

**Miniature lenses / Mount adaptors**




M2520BC-12 M2920BC-12  
M3620BC-12 M0620BC-12 28MMA-M12-155  
M0816BC-12  
M1616BC-12 28MMA-M12-140

**C-mount lenses**

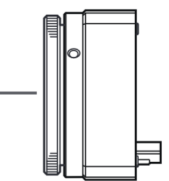


\*Not in our lineup

**C-mount adaptor**

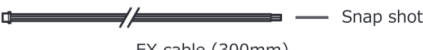


30CMA-R




GPIO

**Cable**

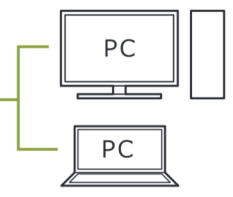


EX cable (300mm)

**Cable**




USB cable (1m)




\*Watec Camera Viewer recommended  
Download from Watec website

**Holder**




H003

**Camera bracket**



B005

**Stand**



MS50