

# WAT-933

1/2.8" Compact High Sensitivity Network B&W Camera

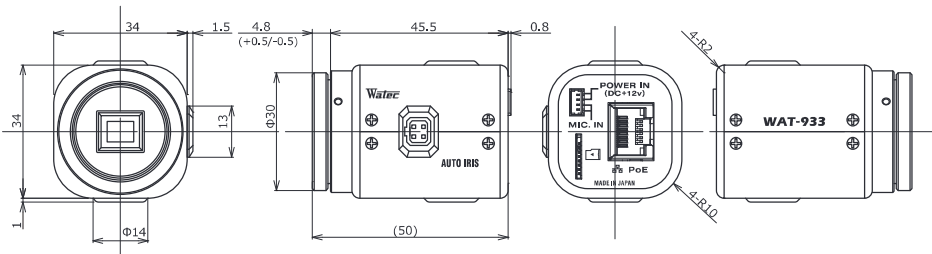
As small as WAT-902 series



## Key features

- Supporting microSD enables stand-alone recording without the network connection
- Video output quick start-up in 6 sec.
- Power-saving PoE : 1.92W/40mA DC+12V : 1.56W/130mA

## Dimensions



## Specifications

Pick-up element	1/2.8 inch BSI 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	1920×1080, 1280×720, 800×600, 704×480, 704×400, 640×480, 640×360, 320×240	
Max. frame rate	30 fps	
Video compression	H.264, MJPEG	
Minimum illumination	0.0001 lx F1.4 (AGC HIGH=72dB, Shutter=OFF)	
S/N	—	
Function settings	Browser	
AE mode	Fixed	1/30, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/15000, 1/30000 (sec.) *1
	EI	1/25, 1/50, 1/100, 1/200, 1/400, 1/800, 1/1600, 1/3200, 1/6400, 1/12800, 1/25600 (sec.) *2
		1/30 - 1/30000 (sec.) *1
		1/25 - 1/25600 (sec.) *2
		×32 - 1/30000 (sec.) *1 *3
		×32 - 1/25600 (sec.) *2 *3
White balance	ATW, PWB, MWB, PRESET (3000K, 5000K, 8000K)	
AGC	ON	0 - 72dB
	OFF	0dB
MGC	—	
Day/Night	—	
Noise reduction	3DNR OFF/ON (Level adjustable)	
Wide dynamic range	WDR OFF/ON (Level adjustable)	
Lens iris	DC	
Back light compensation	BLC, HSBLC	
White blemish correction	ON	
Sharpness	Level adjustable	
Defog	OFF/ON (Level adjustable)	
Digital zoom	—	
Privacy mask	16 masks	
Mirror image	OFF, V-FLIP, H-FLIP, HV-FLIP	
Freeze	—	
Motion detection	OFF/ON 4 areas arbitrarily configurable	
Neg. image	—	
ONVIF	profile S	
Supported protocols	TCP/IP, UDP/IP, RTP(RTCP), RTSP,	
	SNTP, HTTP, FTP, DHCP, DNS	
Interface	RJ45 (10BASE-T, 100BASE-TX), 4P Connector (MIC. IN, POWER IN), Auto iris, microSD (Recommended: SDHC / SDXC standard, MLC type, Speed Class CLASS 10 or more, Capacity of 128GB or less)	
Power supply	PoE +48V (IEEE802.3af), DC+12 - 36V *+12V is recommended for DC input	
Power consumption	1.92W/40mA (PoE +48V), 1.56W/130mA (DC+12V)	
Operating temperature	0 - +50°C	
Storage temperature	-30 - +70°C	
Operating / Storage humidity	95% RH or less (Without condensation)	
Lens mount	CS mount (Back focus adjustable)	
Weight	Approx. 80g	
Accessories	4P cable, Hex, wrench, Clamp filter	

\*1: Frequency=60Hz \*2: Frequency=50Hz \*3: When using the Slow Shutter

\*ONVIF is a trademark of Onvif, Inc. \*microSD is a trademark of SD Association. SD, SDHC and SDXC (and logos) are trademarks of SD-3C, LLC.

\*XProtect is a registered trademark of Milestone Systems A/S.

Accessories Options

**CS-mount lenses**

M13VG288IR M13VG850IR  
AG3Z2812FCS-MPWIR AG4Z1214FCS-MPIR

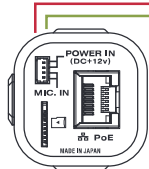
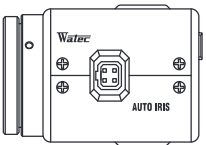
**Miniature lenses / Mount adaptors**

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 30CMA-R

**WAT-933**



microSD  
\*Not in our lineup

**Stands**

MS50 WH-11  
WH-21 WH-31

**Water resistant camera housing / Mounting brackets**

VCHO-15S  
WH-6N PTP-300

4P cable (300mm)

POWER IN (DC+12-36V)

MIC. IN

**Cable with connectors**

CB-06

LINE IN

POWER IN (DC+12V)

CB-07

**Power supply adaptor**

SWI12-12-N-P5  
SWI12-12-E-P5

MIC. IN

\*Use the MIC. which is a plug-in power type.

LAN cable  
(Shielded cable recommended)  
\*Not in our lineup

**Clamp filter**

\*Use the PoE hub or NVR supporting IEEE802.3af for the PoE power supply

Network hub  
\*Not in our lineup

NVR  
\*Not in our lineup

PC  
VMS / Browser / Others  
\*Not in our lineup