

# WAT-933

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

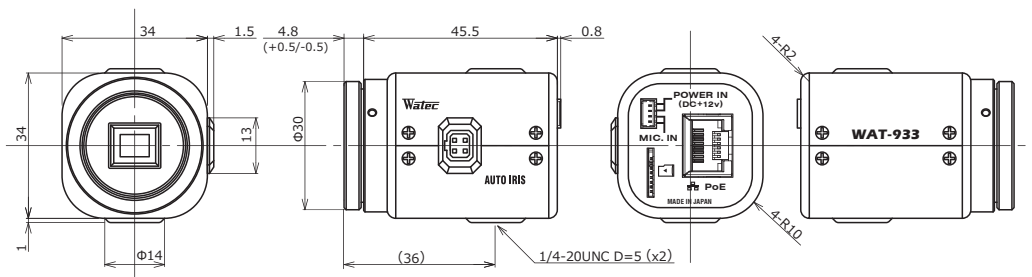
As small as WAT-902 series



## Key features

- Supporting microSD enables stand-alone recording without the network connection
- Video output quick start-up in 6 sec.
- Power-saving PoE : 3.12W/65mA DC+12V : 2.16W/180mA

## Dimensions

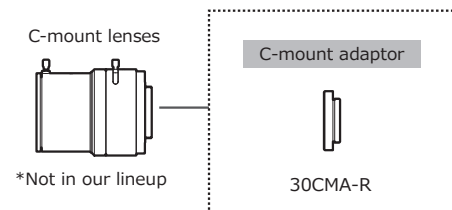
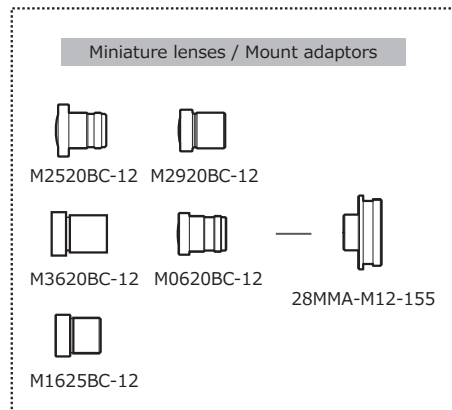
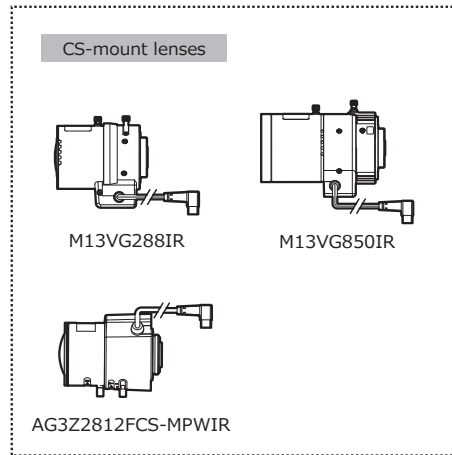


## Specifications

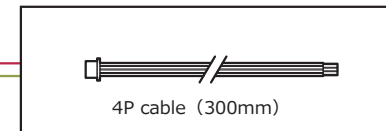
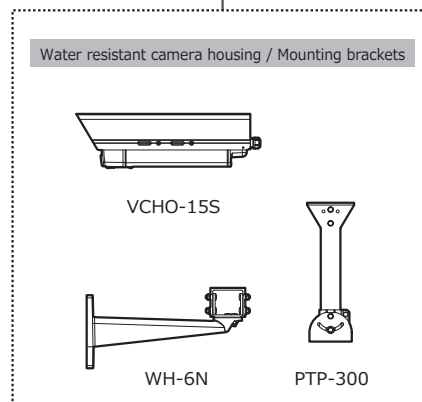
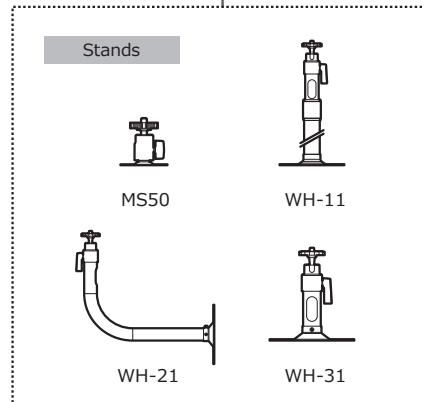
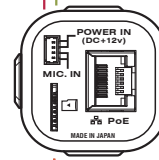
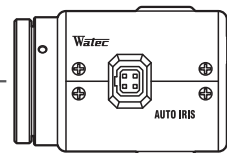
Pick-up element	1/2.8 inch BSI CMOS image sensor	
Number of effective pixels	1945(H) × 1097(V)	
Unit cell size	2.9μm(H) × 2.9μm(V)	
Imaging system	—	
Synchronizing system	Internal	
Scanning system	Progressive	
Output size	1920×1080, 1280×720, 800×600, 704×480, 704×400, 640×480, 640×360, 320×240	
Max. frame rate	60 fps *1	
Video compression	H.264, MJPEG	
Minimum illumination	0.0001 lx F1.4 (AGC HIGH=72dB, Shutter=OFF)	
S/N	—	
	Browser *2	
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.) *3
		1/25, 1/50, 1/100, 1/200, 1/400, 1/800, 1/1600, 1/3200, 1/6400, 1/12800, 1/25600 (sec.) *4
	EI	1/30 - 1/30000 (sec.) *3, 1/25 - 1/25600 (sec.) *4
		×32 - 1/30000 (sec.) *3 *5, ×32 - 1/25600 (sec.) *4 *5
White balance	—	
AGC	ON	0 - 72dB *6
	OFF	0dB
MGC	—	
Day/Night	—	
Gamma Characteristics	γ≈0.45, 0.55, 0.65, 0.75	
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 *7	
Power supply	PoE +48V (IEEE802.3af), DC+12 - 36V *+12V is recommended for DC input	
Power consumption	3.12W/65mA (PoE +48V), 2.16W/180mA (DC +12V)	
Operating / Storage temperature	0 - +50℃ / -30 - +70℃	
Operating / Storage humidity	95% RH or less (Without condensation)	
Lens mount	CS mount (Back focus adjustable)	
Weight	Approx. 83g	
Accessories	4P cable, Hex. wrench, Clamp filter	

\*1: When set to 720P or lower \*2: Google Chrome recommended \*3: Frequency=60Hz \*4: Frequency=50Hz \*5: When using the Slow Shutter  
 \*6: AGC MAX is variable from 0 - 72dB \*7: microSD (Recommended operating conditions: SDHC/SDXC standard, MLC type or high endurance model, Speed Class CLASS 10 or more, Capacity of 256GB or less) \*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



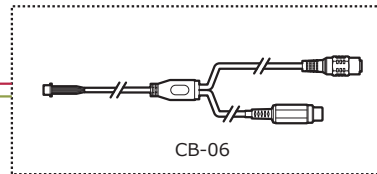
## WAT-933



POWER IN (DC+12-36V)

MIC. IN

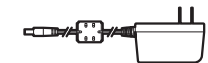
Cable with connectors



LINE IN

POWER IN (DC+12V)

Power supply adaptor

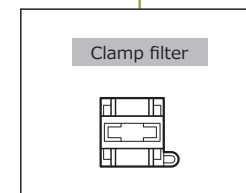
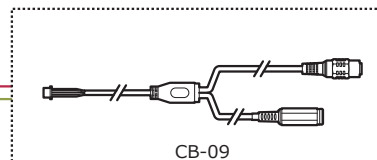
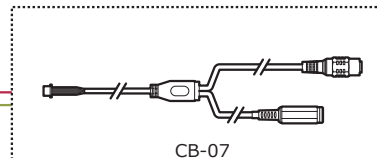


MIC. IN

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

MIC. IN

\*Use the MIC. which is CTIA / AHJ compatible.



VMS / Browser / Others  
\*Not in our lineup