WAT-933

1/2.8" Compact High Sensitivity Network B&W Camera
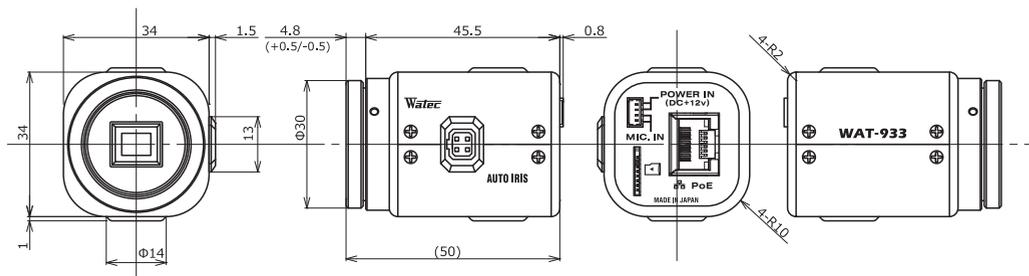
As small as WAT-902 series

ONVIF® | S   microSDXC™   milestone   TECHNOLOGY PARTNER PROGRAM

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

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	—		
Function settings	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		
Acquired Standards	FCC (FCC Rules and Regulations Title 47 CFR Part 15), CE (EN IEC 61000-6-3:2021, EN50130-4:2011 + A1:2014)		

*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

CS-mount lenses
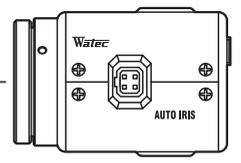
M13VG288IR   M13VG850IR

AG3Z2812FCS-MPWIR   AG4Z1214FCS-MPIR

Miniature lenses / Mount adaptors

M2520BC-12 M2920BC-12

M3620BC-12 M0620BC-12   28MMA-M12-155

M1625BC-12

C-mount lenses
*Not in our lineup

C-mount adaptor

30CMA-R

Stands

MS50   WH-11

WH-21   WH-31

Water resistant camera housing / Mounting brackets

VCHO-15S

WH-6N   PTP-300

POWER IN
(DC+12v)

MIC. IN

PoE

MADE IN JAPAN

microSD
*Not in our lineup

4P cable（300mm）

POWER IN (DC+12-36V)

MIC. IN

Cable with connectors

LINE IN

CB-06

POWER IN (DC+12V)

Power supply adaptor

SWI12-12-N-P5

SWI12-12-E-P5

CB-07

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

CB-09

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

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

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

Clamp filter

Network hub
*Not in our lineup

NVR
*Not in our lineup

PC

VMS / Browser / Others
*Not in our lineup