TOA

TKDN

Network Camera
Z-CCTV Series

Protect What Matters Most

Advanced protection for a safer tomorrow

This CCTV Series is a high-performance model equipped with advanced features including audio support, local SD card recording, and an electric zoom lens with autofocus capability - making it an ideal choice for reliable, flexible surveillance in various environments.

Application : School and University, Factory, Hospital, Office, Building, Car Park, Public Area

High-definition Full HD recording with H.265 method.

The Series utilizes H.265 image compression technology, achieving 30–40% higher compression efficiency compared to H.264 while maintaining the same image quality. This allows for higher-quality recording with the same data size, providing advanced performance with reduced storage requirements.
Additionally, the camera offers audio support, local SD card recording, and an electric zoom lens with autofocus, making it a versatile and reliable choice for various surveillance needs.

Smooth 30 fps live display even with multi-screen view

Note: When displaying more than 49 cameras simultaneously in live view, the maximum frame rate will be limited to 10 fps.

RBSS - Reliable Security Systems

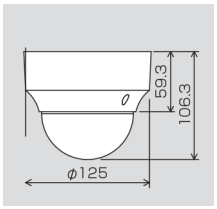
This is a certification system established by the Japan Security Systems Association to standardize the required functions and performance of security devices, with the goal of contributing to the safety and peace of mind of the general public.

Specifications

Z-NC5250R-AS

IR Dome Full HD Network Camera

- H.265 image compression
- Indoor Use
- Day & Night Function (high-sensitivity black & white mode in dark places)
- Wide Dynamic Range (WDR) Function
- PoE (IEEE802.3af) compatible
- Include with Audio input & Audio Output
- Support Onvif



Specification		Z-NC5250R-AS
Power Source		PoE (IEEE802.3af)
Current Consumption		7.1 W: PoE (DC48 V, 147.9 mA)
Monitor Output		VBS1.0 V (p-p) 75Ω RCA pin jack composite signal
Voice Input		1 system unbalanced line/mic (switched by software) Ø3.5 mini jack (monaural) Line: -10 dB (*1) Input impedance 10 kΩ ; Microphone: -60 dB (*1) Input impedance 2.2 kΩ Power supply for microphone: +15 V/for microphone unit N-MC10 (set with switch)
Audio Input		1 system -10dB (*1) Applicable load impedance 10 kΩ or more Unbalanced Ø3.5 mini jack (monaural)
Contact Input		1 systems, No-voltage make contact input, open voltage: 3.3 V DC Short-circuit current: 10mA or less, loop resistance 200Ω or less
Contact Output		1 system open collector output Withstand voltage: 30 V DC, Allowable current: 50 mA
Camera	Images Sensor	1 /2.8 type CMOS
	Effective number of pixel	1945 (H) × 1097 (V) 2.13 million pixels
	Scanning method	Progressive
	Minimum subject illuminance	0.03 lx (50%, color, F1.5, slow shutter off) 0.01 lx (20%, color, F1.5, slow shutter off) 0.0006 lx (20%, color, F1.5, slow shutter 15/30 seconds, converted value) 0.003 lx (50%, black and white, F1.5, slow shutter off) 0.0002 lx (50%, black and white, F1.5, slow shutter 15/30 seconds, converted value) 0 lx (50% black and white, F1.5, when infrared LED is on)
	Dynamic range	120 dB or more (at wide dynamic: at HIGH)
	Slow shutter (sensitivity increased)	Off, maximum 2/30 seconds, maximum 4/30 seconds, maximum 8/30 seconds, maximum 15/30 seconds
	Shutter speed	Automatic, flickerless (50 Hz/60 Hz), blur direction (1/200 to 1/10000), 1/30 second fixed, 1/50 second fixed, 1/60 second fixed, 1/100 second fixed, 1/120 second fixed, 1/200 second fixed, 1/250 second fixed, 1/400 second fixed, 1/500 second fixed, 1/800 second fixed, 1/1000 second fixed, 1/2000 second fixed, 1/2500 second fixed, 1/4000 seconds fixed, 1/5000 seconds fixed, 1/8000 seconds fixed, 1/10000 seconds fixed
	White Balance	ATW1, ATW2, AWB
	Backlight compensation (wide dynamic)	OFF, LOW, MID, HIGH
	Infrared LED irradiation distance	Automatic, flickerless (50 Hz/60 Hz), blur reduction (1/200 to 1/1000)
	Function	Adjustment mode, Brightness (9 levels),color depth (9 levels), enhancer (9 levels), AGC, contrast (9 levels), fog correction, false color suppression (purple fringe, mercury lamp), distortion correction, day/night switching (always color, auto (color priority), auto (standard), auto (black and white priority), always black and white, schedule), electric zoom, electric focus, autofocus adjustment, digital noise reduction (3 levels), peripheral illumination correction
Lens	Focal length	f=3.1~10.0mm (3.2 times)
	Maximum aperture ratio	1 : 1.5 – 2.8
	Angle of view	[Shooting mode 16:9] Horizontal: 113° (W) ~ 34° (T), Vertical: 59° (W) ~ 19° (T) [Shooting mode 3:2] Horizontal: 89° (W) ~ 28° (T), Vertical: 59° (W) ~ 19° (T) [Shooting mode 4:3]Horizontal: 80° (W) ~ 26° (T), Vertical: 59° (W) ~ 19° (T)
Network	Network I/F	10BASE-T/100BASE-TX automatic/fixed: RJ45
	Network protocol	TCP, UDP, RTP, RTCP, RTSP, IGMP, HTTP, HTTPS, FTP, NTP, SNMP, SMTP, SSL/TLS, RTMP
	Image compression method	Stream 1, 2, 4: H. 265, H. 264 ; Stream 3: JPEG
	Image size (resolution)	[Shooting mode 16:9] - Stream 1, 4: 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180; Stream 2: 1280 x 720, 640 x 360, 320 x 180 ; Stream 3: 1920 x 1080, 1280 x 720, 640 x 480, 640 x 360, 320 x 180 [Shooting mode 3:2] - Stream 1-4: 720 x 480 [Shooting mode 4:3] - Stream 1, 3, 4: 1280 x 960, 640 x 480, 320 x 240; Stream 2: 640 x 480, 320 x 240
	Image Quality	6 stages
	Frame Rate	H. 265, H. 264: up to 30 fps ; JPEG: up to 15 fps
	Bit Rate	Maximum 50 Mbps (when using voice function: Maximum 30 Mbps, When using HTTPS function: 16 Mbps) *1 Mbps=1024 kbps ; Per stream H.265: 56 kbps to 5120 kbps H. 264: 64 kbps to 8192 kbps JPEG: 32 kbps to 33600 kbps

	Audio compression method	G. 711 μ-law, ACC-LC
	Audio sampling frequency	G. 711 μ-lam: 8 kHz; ACC-LC: 16 kHz, 32 kHz
	Number of concurrent accesses	14 (when using HTTPS function: 8)
SD card recording (*2)		Resolution: 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 ; Recording rate: up to 15 fps Compression method: H.264
Other features		Access restriction function, tampering detection, motion detection (3 locations), privacy mask (20 locations), high-quality area specification function, image reversal (mirror, flip, both), image rotation (0°, 90°), screen Internal character display (alphabet, numbers, symbols, hiragana, katakana, kanji), HTTP(S) event notification function, SD card password lock, cropping zoom function, RBSS2018 standard advanced function 5.2.6 performance 2 compatible
Operating temperature limit		Counting the number of people passing through, counting the number of people
Operating humidity range		90%RH or less (no condensation)
Place of use		Indoor
Finishing		Case: Polycarbonate + ABS resin off-white paint; Dome part: Acrylic resin (transparent)
Size		Ø125x106.3(H) mm
Mass		550 g
Accessories		LAN relay adapter (installed on the main unit) μ1, CD (IP setting tool, SD card password release tool, operation/setting guide (PDF)μ1
Sold separately		Camera ceilling embedding bracket: C-BK203U; Camera microphone unit: N-MC10 User license: N-UL5A, N-UL5H

* 0 dB = 1 V

Z-NC5450R-AS

Outdoor IR Full HD Network Camera

- H.265 image compression
- Day & Night Function (high-sensitivity black & white mode in dark places)
- Wide Dynamic Range (WDR) Function
- Dustproof & waterproof (IP 66)
- Impact resistant (IK 6)
- PoE (IEEE802.3af) compatible
- Include with Audio input & Audio Output
- Support Onvif

Specification		Z-NC5450R-AS
Power Source		PoE (IEEE802.3af)
Current Consumption		10.5 W: PoE (DC48 V, 218.8 mA)
Monitor Output		VBS1.0 V (p-p) 75Ω RCA pin jack composite signal
Voice Input		1 system unbalanced line/mic (switched by software) Ø3.5 mini jack (monaural) Line: -10 dB (*1) Input impedance 10 kΩ ; Microphone: -60 dB (*1) Input impedance 2.2 kΩ Power supply for microphone: +15 V/for microphone unit N-MC10 (set with switch) Power supply: Phantom power/microphone power line (*2) (set by switch)
Audio Input		1 system -10dB (*1) Applicable load impedance 10 kΩ or more Unbalanced Ø3.5 mini jack (monaural)
Contact Input		1 systems, No-voltage make contact input, open voltage: 3.3 V DC Short-circuit current: 10mA or less, loop resistance 200Ω or less
Contact Output		1 system open collector output Withstand voltage: 30 V DC, Allowable current: 50 mA
Camera	Images Sensor	1 /2.8 type CMOS
	Effective number of pixel	1945 (H) × 1097 (V) 2.13 million pixels
	Scanning method	Progressive
	Minimum subject illuminance	0.03 lx (50%, color, F1.5, slow shutter off) 0.01 lx (20%, color, F1.5, slow shutter off) 0.0006 lx (20%, color, F1.5, slow shutter 15/30 seconds, converted value) 0.003 lx (50%, black and white, F1.5, slow shutter off) 0.0002 lx (50%, black and white, F1.5, slow shutter 15/30 seconds, converted value) 0 lx (50% black and white, F1.5, when infrared LED is on)
	Dynamic range	120 dB or more (at wide dynamic: at HIGH)
	Slow shutter (sensitivity increased)	Off, maximum 2/30 seconds, maximum 4/30 seconds, maximum 8/30 seconds, maximum 15/30 seconds
	Shutter speed	Automatic, flickerless (50 Hz/60 Hz), blur reduction (1/200 to 1/10000), 1/30 second fixed, 1/50 second fixed, 1/60 second fixed, 1/100 second fixed, 1/120 second fixed, 1/200 second fixed, 1/250 second fixed, 1/400 second fixed, 1/500 second fixed, 1/800 second fixed, 1/1000 second fixed, 1/2000 second fixed, 1/2500 second fixed, 1/4000 seconds fixed, 1/5000 seconds fixed, 1/8000 seconds fixed, 1/10000 seconds fixed
	White Balance	ATW1, ATW2, AWB
	Backlight compensation (wide dynamic)	OFF, LOW, MID, HIGH

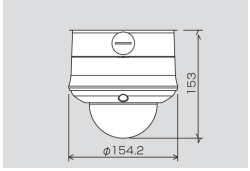
Camera	Infrared LED irradiation distance	50 m
	Function	Adjustment mode, Brightness (9 levels),color depth (9 levels), enhancer (9 levels), AGC, contrast (9 levels), fog correction, false color suppression (purple fringe, mercury lamp), distortion correction, day/night switching (always color, auto (color priority), auto (standard), auto (black and white priority), always black and white, schedule), electric zoom, electric focus, autofocus adjustment, digital noise reduction (3 levels), peripheral illumination correction
Lens	Focal length	f=3.1~10.0mm (3.2 times)
	Maximum aperture ratio	1 : 1.5 – 2.8
	Angle of view	[Shooting mode 16:9] Horizontal: 113° (W) ~ 34° (T), Vertical: 59° (W) ~ 19° (T) [Shooting mode 3:2] Horizontal: 89° (W) ~ 28° (T), Vertical: 59° (W) ~ 19° (T) [Shooting mode 4:3]Horizontal: 80° (W) ~ 26° (T), Vertical: 59° (W) ~ 19° (T)
Network	Network I/F	10BASE-T/100BASE-TX automatic/fixed: RJ45
	Network protocol	TCP, UDP, RTP, RTCP, RTSP, IGMP, HTTP, HTTPS, FTP, NTP, SNMP, SMTP, SSL/TLS, RTMP
	Image compression method	Stream 1, 2, 4: H. 265, H. 264 ; Stream 3: JPEG
	Image size (resolution)	[Shooting mode 16:9] Stream 1, 4: 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 ; Stream 2: 1280 x 720, 640 x 360, 320 x 180 ; Stream 3: 1920 x 1080, 1280 x 720, 640 x 480, 640 x 360, 320 x 240, 320 x 180 [Shooting mode 3:2] Stream 1-4: 720 x 480 [Shooting mode 4:3] Stream 1, 3, 4: 1280 x 960, 640 x 480, 320 x 240 ; Stream 2: 640 x 480, 320 x 240
	Image Quality	6 stages
	Frame Rate	H. 265, H. 264: up to 30 fps ; JPEG: up to 15 fps
	Bit rate	Maximum 50 Mbps (when using voice function: Maximum 30 Mbps, When using HTTPS function: 16 Mbps) *1 Mbps=1024 kbps ; Per stream H.265: 56 kbps to 5120 kbps ; H. 264: 64 kbps to 8192 kbps JPEG: 32 kbps to 33600 kbps
	Audio compression method	G. 711 μ-law, ACC-LC
	Audio sampling frequency	G. 711 μ-law: 8 kHz ; ACC-LC: 16 kHz, 32 kHz
	Number of concurrent accesses	14 (when using HTTPS function: 8)
SD card recording (*2)		Resolution: 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 ; Recording rate: max. 15 fps Compression method: H.264 ; Compatible SD card: SDXC (*3)
Other features		Access restriction function, tampering detection, motion detection (3 locations), privacy mask (20 locations), high-quality area specification function, image reversal (mirror, flip, both), image rotation (0°, 90°), screen Internal character display (alphabet, numbers, symbols, hiragana, katakana, kanji), HTTP(S) event notification function, SD card password lock, cropping zoom function, RBSS2018 standard advanced function 5.2.6 performance 2 compatible
Operating temperature limit		-10°C ~ +50°C
Operating humidity range		90%RH or less (no condensation)
Place of use		Indoors, outdoors (excluding coast and industrial areas with strong corrosive conditions, places with a lot of dust, and high places subject to strong wind pressure)
Dustproof / waterproof performance		IP66
Finishing		Case/base/sunshide: Alumunium pearl white painted ; Base cover: ASA resin pearl white painting Front Panel: PC resin (transparent, hydrolic coat), PC (transparent), PC resing (black)
Size		120 (W) x 214 (H) x 354.5 (D) mm
Mass		1.9 kg
Accessories		Safety wire…1, Hole cover…1 set, Cable clamp…1, Hexagonal wrench…1, Sunshade mounting screw…2, Safety wire mounting screw…1, Pan tilt bracket mounting screw…3, CD (IP setting tool, SD card password unblocking tool, Operation and setting guide (PDF)…1
Sold separately		Outdoor camera pole mounting bracket: C-BC450PM ; Pole mounting band: YS-60B ; (Pole mounting: C-BC450PM + YS-60dB) User license: N-UL5A, N-UL5H

* 0 dB = 1 V

Z-NC5850R-AS

Outdoor IR Dome Full HD Network Camera

- H.265 image compression
- Day & Night Function (high-sensitivity black & white mode in dark places)
- Wide Dynamic Range (WDR) Function
- Dustproof & waterproof (IP 66)
- Impact resistant (IK 10)
- PoE (IEEE802.3af) compatible
- Include with Audio input & Audio Output
- Support Onvif



Specification		Z-NC5850R-AS
Power Source		PoE (IEEE802.3af)
Current Consumption		10.5 W: PoE (DC48 V, 147,9 mA)
Monitor Output		VBS1.0 V (p-p) 75Ω RCA pin jack composite signal
Voice Input		1 system unbalanced line/mic (switched by software) Ø3.5 mini jack (monaural) Line: -10 dB (*1) Input impedance 10 kΩ ; Microphone: -60 dB (*1) Input impedance 2.2 kΩ Power supply for microphone: +15 V/for microphone unit N-MC10 (set with switch) Power supply : Phantom power / microphone power line (*2) (set with swith)
Audio Input		1 system -10dB (*1) Applicable load impedance 10 kΩ or more Unbalanced ; Ø3.5 mini jack (monaural)
Contact Input		1 systems, No-voltage make contact input, open voltage: 3.3 V DC Short-circuit current: 10mA or less, loop resistance 200Ω or less
Contact Output		1 system open collector output Withstand voltage: 30 V DC, Allowable current: 50 mA
Camera	Images Sensor	1 /2.8 type CMOS
	Effective number of pixel	1945 (H) × 1097 (V) 2.13 million pixels
	Scanning method	Progressive
	Minimum subject illuminance	0.03 lx (50%, color, F1.5, slow shutter off) 0.01 lx (20%, color, F1.5, slow shutter off) 0.0006 lx (20%, color, F1.5, slow shutter 15/30 seconds, converted value) 0.003 lx (50%, black and white, F1.5, slow shutter off) 0.0002 lx (50%, black and white, F1.5, slow shutter 15/30 seconds, converted value) 0 lx (50% black and white, F1.5, when infrared LED is on)
	Dynamic range	120 dB or more (at wide dynamic: at HIGH)
	Slow shutter (sensitivity increased)	Off, maximum 2/30 seconds, maximum 4/30 seconds, maximum 8/30 seconds, maximum 15/30 seconds
	Shutter speed	Automatic, flickerless (50 Hz/60 Hz), blur direction (1/200 to 1/10000), 1/30 second fixed, 1/50 second fixed, 1/60 second fixed, 1/100 second fixed, 1/120 second fixed, 1/200 second fixed, 1/250 second fixed, 1/400 second fixed, 1/500 second fixed, 1/800 second fixed, 1/1000 second fixed, 1/2000 second fixed, 1/2500 second fixed, 1/4000 seconds fixed, 1/5000 seconds fixed, 1/8000 seconds fixed, 1/10000 seconds fixed
	White Balance	ATW1, ATW2, AWB
	Backlight compensation (wide dynamic)	OFF, LOW, MID, HIGH
	Infrared LED irradiation distance	50 m
	Function	Adjustment mode, Brightness (9 levels),color depth (9 levels), enhancer (9 levels), AGC, contrast (9 levels), fog correction, false color suppression (purple fringe, mercury lamp), distortion correction, day/night switching (always color, auto (color priority), auto (standard), auto (black and white priority), always black and white, schedule), electric zoom, electric focus, autofocus adjustment, digital noise reduction (3 levels), peripheral illumination correction
Lens	Focal length	f=3.1~10.0mm (3.2 times)
	Maximum aperture ratio	1 : 1.5 – 2.8
	Angle of view	[Shooting mode 16:9] Horizontal: 113° (W) ~ 34° (T), Vertical: 59° (W) ~ 19° (T) [Shooting mode 3:2] Horizontal: 89° (W) ~ 28° (T), Vertical: 59° (W) ~ 19° (T) [Shooting mode 4:3]Horizontal: 80° (W) ~ 26° (T), Vertical: 59° (W) ~ 19° (T)
Network	Network I/F	10BASE-T/100BASE-TX automatic/fixed: RJ45
	Network protocol	TCP, UDP, RTP, RTCP, RTSP, IGMP, HTTP, HTTPS, FTP, NTP, SNMP, SMTP, SSL/TLS, RTMP
	Image compression method	Stream 1, 2, 4: H. 265, H. 264 ; Stream 3: JPEG
	Image size (resolution)	[Shooting mode 16:9] Stream 1, 4: 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 ; Stream 2: 1280 x 720, 640 x 360, 320 x 180 ; Stream 3: 1920 x 1080, 1280 x 720, 640 x 480, 640 x 360, 320 x 240, 320 x 180 [Shooting mode 3:2] Stream 1-4: 720 x 480 [Shooting mode 4:3] Stream 1, 3, 4: 1280 x 960, 640 x 480, 320 x 240 ; Stream 2: 640 x 480, 320 x 240
	Image quality	6 stages
	Frame Rate	H. 265, H. 264: up to 30 fps ; JPEG: up to 15 fps
	Bit rate	Maximum 50 Mbps (when using voice function: Maximum 30 Mbps, When using HTTPS function: 16 Mbps) *1 Mbps=1024 kbps ; Per stream H.265: 56 kbps to 5120 kbps ; H. 264: 64 kbps to 8192 kbps JPEG: 32 kbps to 33600 kbps
	Audio compression method	G. 711 μ-law, ACC-LC
	Audio sampling frequency	G. 711 μ-law: 8 kHz ; ACC-LC: 16 kHz, 32 kHz
	Number of concurrent accesses	14 (when using HTTPS function: 8)
SD card recording (*2)		Resolution: 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 ; Recording rate: up to 15 fps Compression method: H.264 ; Compatible SD card: SDXC (*3)
Other features		Access restriction function, tampering detection, motion detection (3 locations), privacy mask (20 locations), high-quality area specification function, image reversal (mirror, flip, both), image rotation (0°, 90°), screen Internal character display (alphabet, numbers, symbols, hiragana, katakana, kanji), HTTP(S) event notification function, SD card password lock, cropping zoom function, RBSS2018 standard advanced function 5.2.6 performance 2 compatible
Operating temperature limit		-10°C ~ +50°C

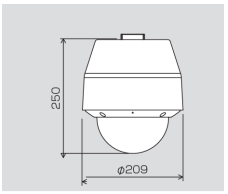
Operating humidity range	90%RH or less (no condensation)
Place of use	Indoors, outdoors (excluding coast and industrial areas with strong corrosive conditions, places with a lot of dust, and high places subject to strong wind pressure)
Dustproof / waterproof performance	IP66
Impact resistance	50J
Finishing	Case/Bezel: Aluminium die-cast pearl white painted ; Dome cover: Polycarbonate (transparent) hydrophilic coat
Size	Ø154.2x153 (H) mm
Mass	1.7 kg
Accessories	L-shaped wrench…1, Sealing rubber…4, Sealing sheet…1, CD (IP setting tool, SD card password release tool, operation/setting guide (PDF))…1
Sold separately	Camera ceilling hanging bracket: C-BK800P ; Camera ceilling embedding bracket: C-BK800U Camera wall mounting bracket: C-BK800W ; Camera pole mounting bracket: C-BC771PM Pole mounting band: YS-60B (pole mounting: C-BK800W+C-BC771PM+YS-60B) User license: N-UL5A, N-UL5H

* 0 dB = 1 V

Z-NC5700A-AS

Outdoor Full HD Network PTZ Camera

- H.265 image compression
- Day & Night Function (high-sensitivity black & white mode in dark places)
- Wide Dynamic Range (WDR) Function
- Dustproof & waterproof (IP 66)
- Impact resistant (IK 10)
- PoE (IEEE802.3af) compatible
- Include with Audio input & Audio Output
- Support Onvif



Specification		Z-NC5700A-AS
Power Source		PoE+ (IEEE802.3at) or 60W injector (*1)
Power Consumption		23.0 W: PoE+ (DC54 V, 426 mA) ; 48.8 W: 60W injector (*1) (DC54 V, 904 mA)
Voice Input		1 system unbalanced line/mic (switched by software) Ø3.5 mini jack (monaural) Line: -10 dB (*2) Input impedance 10 kΩ ; Microphone: -60 dB (*2) Input impedance 2.2 kΩ Power supply for microphone: +15 V/for microphone unit N-MC10 (set with switch) Power supply: Phantom power/microphone power line (set by switch) (*3)
Audio Input		1 system -10dB (*2) Applicable load impedance 10 kΩ or more Unbalanced ; Ø3.5 mini jack (monaural)
Contact Input		3 systems, No-voltage make contact input, open voltage: 3.3 V DC Short-circuit current: 10mA or less, loop resistance 200Ω or less
Contact Output		1 system open collector output Withstand voltage: 30 V DC, Allowable current: 50 mA
Camera	Images Sensor	1 /2.8 type CMOS
	Effective number of pixel	1936 (H) × 1100 (V) 2.12 million pixels
	Scanning method	Progressive
	Minimum subject illuminance	[When color night mode function is enabled] 0.0002 lx (50%, color, F1.6, slow shutter off) [When color night mode function is disabled] 0.01lx (50%, color, F1.6, slow shutter off) 0.004 lx (20%, color, F1.6, slow shutter off, converted value) 0.0003 lx (20% color, F1.6, slow shutter 15/30 seconds, converted value) 0.0002 lx (50%, black and white, F1.6, slow shutter off)
	Dynamic range	100 dB or more (at wide dynamic: at HIGH)
	Slow shutter (sensitivity increased)	Off, maximum 2/30 seconds, maximum 3.75/30 seconds, maximum 7.5/30 seconds, maximum 15/30 seconds
	Shutter speed	Automatic, flickerless, fixed at 1/100 seconds, fixed at 1/120 seconds, Fixed at 1/250 seconds, fixed at 1/500 seconds, fixed at 1/1000 seconds, Fixed at 1/2000 seconds, fixed at 1/4000 seconds, fixed at 1/10000 seconds
	White Balance	ATW1/ATW2/AWB/Sodium lamp/Mercury lamp
	Wide Dynamic	Off, E-WDR, LOW, HIGH
	Image quality correction	Off, backlight correction, fog correction, strong light correction
	Electronic zoom	12 times
	Auto Focus	Stop AF/Fixed (preset)
	Character display	Event-linked message, stream information, date and time, name, preset, sector
	Function	Brightness (9 levels), enhancer (9 levels), digital noise reduction (2 levels), AGC, day/night switching (always day, auto (day priority), auto (standard), always night, schedule)
	Zoom magnification	30 times
	Focal length	f=4.3~129.0mm

Lens	Maximum aperture ratio	1 : 1.6 – 4.7
	Maximum angle of view	[Shooting mode 16:9] Horizontal: 63.7° (W) ~ 2.3° (T), Vertical: 37.8° (W) ~ 1.3° (T) [Shooting mode 3:2] Horizontal: 52.9° (W) ~ 2.1° (T), Vertical: 37.8° (W) ~ 1.3° (T) [Shooting mode 4:3] Horizontal: 48.3° (W) ~ 1.6° (T), Vertical: 37.8° (W) ~ 1.3° (T)
	Focus range	WIDE end: 0.1 m to infinity ; TELE end: 1.5 m to infinity
Swivel Base	Rotation range	Horizontal: 360° (endless) Vertical: +5° to -185°
	Rotation Speed	Preset maximum 400°/s (manual maximum 150°/s)
Network	Network I/F	10BASE-T/100BASE-TX automatic/fixed: RJ45
	Network protocol	TCP, UDP, RTP, RTCP, RTSP, IGMP, HTTP, HTTPS, FTP, NTP, SNMP, SMTP, SSL/TLS, RTMP
	Image compression method	Stream 1, 2, 4: H. 265, H. 264 ; Stream 3: JPEG
	Image size (resolution)	[Shooting mode 16:9] Stream 1, 4: 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 ; Stream 2: 1280 x 720, 640 x 360, 320 x 180 ; Stream 3: 1920 x 1080, 1280 x 720, 640 x 480, 640 x 360, 320 x 240, 320 x 180 [Shooting mode 3:2] Stream 1-4: 720 x 480 [Shooting mode 4:3] Stream 1, 3, 4: 1280 x 960, 640 x 480, 320 x 240 ; Stream 2: 640 x 480, 320 x 240
	Image quality	6 stages
	Frame rate	H. 265, H. 264: up to 30 fps ; JPEG: up to 15 fps
	Bit rate	Maximum 40 Mbps (when using voice function: Maximum 20 Mbps, When using HTTPS function: 16 Mbps) *1 Mbps=1024 kbps ; Per stream H.265: 56 kbps to 5120 kbps ; H. 264: 64 kbps to 8192 kbps JPEG: 32 kbps to 33600 kbps
	Audio compression method	G. 711 μ-law, ACC-LC
	Audio sampling frequency	G. 711 μ-lam: 8 kHz ; ACC-LC: 16 kHz, 32 kHz
	Number of concurrent accesses	14 (when using HTTPS function: 8)
SD card recording (*4)		Resolution: 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 ; Recording rate: max. 15 fps Compression method: H.264 ; Compatible SD card: SD x C (*5)
Other features		Tampering detection (*6), Privacy mask (8 locations), Motion detection (3 locations) (*6), Shake correction, Auto flip, Access restriction function, Point view, Zoom viem, Sector (direction, area), On-screen character display (alphabet, numbers, symbols, hiragana,katagana, kanji), HTTP(S) event notification function, SD card password lock
Operating temperature limit		When supplying PoE+ power: -15 °C to +50 °C (continuously energized below -10 °C) When using 60W injector (*1): -40 °C to +50 °C (continuously energized below -30 °C)
Operating humidity range		90%RH or less (no condensation)
Place of use		Indoors, outdoors (excluding coast and industrial areas with strong corrosive conditions, places with a lot of dust, and high places subject to strong wind pressure)
Dustproof / waterproof performance		IP66
Finishing		Case: polycarbonate black (Munsell N1.0 approximate color) Decorative frame: polycarbonate black (Munsell N1.0 approximate color) painted Sunshade: ASA resin pearl white paint ; Dome cover: : polycarbonate (transparent) hydrophilic coat)
Size		Camera part external size: Ø209 x 250 (H) mm (Dome part external size: Ø148.5 mm)
Mass		3 kg
Accessories		Camera mounting screws μ4, Humidity control sheet μ2, L-shaped wrench…1, CD (IP setting tool, operation/setting guide (PDF), SD card password release tool)…1
Sold separately		Outdoor camera ceilling hanging bracket: C-BK170P ; Outdoor camera pole mounting bracket: C-BK170PM Outdoor camera wall mounting bracket: C-BK170W ; Pole mounting band: YS-60B (pole mounting: C-BK170PM+C-BK170W+YS-60B); User license: N-UL5A, N-UL5H 60W injector: PD-9501GR/AC-JP (arranged product)
Hardware		CPU: 4th generation Intel Core i series or later, 4 cores or more ; Memorry : 4GB or more HDD free space: 50MB or more ; LAN: 100BASE-TX or above ; Grapics : VRAM 256MB or higher Display : resolution 1280 x 768 or higher, High Color (65536) or higher
OS		Windows 7 Professional (32/64 bit) Service Pack1 ; Windows 8.1 Pro (32/64 bit) ; Windows 8.1 (32/64 bit) Windows 10 Pro (32/64 bit) ; Windows 10 Home (32/64 bit) ; Windows 11 Pro (64 bit) ; Windows 11 Home (64 bit)
Browser		Internet Explores 11 (32 bit) ; Microsoft Edge

(*1) PD-9501GR/AC-JP (sold separately) ; (*2) 0 dB=1 V ; (*3) Please use the recommended microphone ; (*4) When recording on an SD card, stream 4 is used only for recording ; (*5) SD?C cards of up 256 GB formatted with this unit can be used. Please use the recommended industrial SD?C card. For more information, please refer to the TOA product data download site (https://www.toa-products.com/) ; (*6) position No. it works with 1.

Notes:
- The personal computer requirements do not guarantee operation on all PCs.
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Scan for more info

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