



2014

TS Product Catalogue



**Network
Surveillance**



TSNB4501

Full HD Box Type Network Camera

Box, 1080p real time, H.264/MPEG-4/MJPEG, 2-way audio, day and night ICR, 3GPP, dual voltage/PoE, without lens



Features

- Full HD 1080p multi streaming
- 1/2.7-inch OmniVision 2-megapixel CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSNB4501
Type	Indoor, box camera
Image Sensor	1/2.7-inch OmniVision 2-megapixel CMOS image sensor
Lens	<ul style="list-style-type: none"> • CS/C mount (with adaptor ring) • DC iris support
Effective Pixels	1920 × 1080
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s
White Balance	Manual/AWB/ATW
Video Compression	H.264/MPEG-4/MJPEG
Video Streaming	Simultaneous
Resolutions	Full HD 1080p/HD 720p/D1/CIF

Model	TSNB4501
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 1920 × 1080 pixels • NTSC: maximum 30 frames per second at 1920 × 1080 pixels
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	Compatible with infrared illuminator
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	0 °C to 60 °C (32 °F to 140 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (W × H × L)	56 mm × 68 mm × 125 mm (2.20 in × 2.68 in × 4.92 in)
Protection Rating	-
Related Products	-

*Design and specifications are subject to change without prior notice.

TSNB4502

Full HD Box Type Network Camera with Lens

Box, 1080p real time, H.264/MPEG-4/MJPEG, 2-way audio, day and night ICR, 3GPP, dual voltage/PoE, with megapixel lens (f = 2.8 to 12 mm, F 1.2 vari-focal IR corrected)



Features

- Included F 1.2, f = 2.8 to 12 mm vari-focal DC auto iris lens
- Full HD 1080p multi streaming
- 1/2.7-inch OmniVision 2-megapixel CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSNB4502
Type	Indoor, box camera, included megapixel lens
Image Sensor	1/2.7-inch OmniVision 2-megapixel CMOS image sensor
Lens	F 1.2, f = 2.8 to 12 mm vari-focal DC auto iris
Effective Pixels	1920 × 1080
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s
White Balance	Manual/AWB/ATW
Video Compression	H.264/MPEG-4/MJPEG
Video Streaming	Simultaneous

Model	TSNB4502
Resolutions	Full HD 1080p/HD 720p/D1/CIF
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 1920 × 1080 pixels • NTSC: maximum 30 frames per second at 1920 × 1080 pixels
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	Compatible with infrared illuminator
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	0 °C to 60 °C (32 °F to 140 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (W × H × L)	56 mm × 68 mm × 125 mm (2.20 in × 2.68 in × 4.92 in)
Protection Rating	-
Related Products	-

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TSNB4703

3-megapixel WDR Box Type Network Camera

Box, 3-megapixel 15 fps, H.264/MPEG-4/MJPEG, 2-way audio, WDR, day and night ICR, 3GPP, dual voltage/PoE, without lens



Features

- 3-megapixel multi streaming
- 1/2.8-inch Sony IMX036 CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Wide dynamic range (WDR)
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSNB4703
Type	Indoor, box camera
Image Sensor	1/2.8-inch Sony IMX036 CMOS image sensor
Lens	<ul style="list-style-type: none"> • CS/C mount (with adaptor ring) • DC iris suport
Effective Pixels	2048 × 1536
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s
White Balance	Manual/AWB/ATW
Video Compression	H.264/MPEG-4/MJPEG
Video Streaming	Simultaneous

Model	TSNB4703
Resolutions	2048 × 1536 pixels/Full HD 1080p/HD 720p/D1/CIF
Frame Rate	Maximum 15 frames per second (2048 × 1536 pixels)
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	Compatible with infrared illuminator
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness, contrast, saturation, sharpness, WDR level, privacy masking zones, exposure mode (indoor/outdoor/night/low noise/moving/customize 1 to 3)
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	0 °C to 60 °C (32 °F to 140 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: 100 V to 240 V AC, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (W × H × L)	56 mm × 68 mm × 125 mm (2.20 in × 2.68 in × 4.92 in)
Protection Rating	-
Related Products	-

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TSNB4704

3-megapixel WDR Box Type Network Camera with Lens

Box, 3-megapixel 15 fps, H.264/MPEG-4/MJPEG, 2-way audio, WDR, day and night ICR, 3GPP, dual voltage/PoE, with megapixel lens (f = 2.8 to 12 mm, F 1.2 vari-focal IR corrected)



Features

- Included F 1.2, f = 2.8 to 12 mm vari-focal DC auto iris lens
- 3-megapixel multi streaming
- 1/2.8-inch Sony IMX036 CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Wide dynamic range (WDR)
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSNB4704
Type	Indoor, box camera, included megapixel lens
Image Sensor	1/2.8-inch Sony IMX036 CMOS image sensor
Lens	F 1.2, f = 2.8 to 12 mm vari-focal DC auto iris
Effective Pixels	2048 × 1536
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s
White Balance	Manual/AWB/ATW
Video Compression	H.264/MPEG-4/MJPEG

Model	TSNB4704
Video Streaming	Simultaneous
Resolutions	2048 × 1536 pixels/Full HD 1080p/HD 720p/D1/CIF
Frame Rate	Maximum 15 frames per second (2048 × 1536 pixels)
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	Compatible with infrared illuminator
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness, contrast, saturation, sharpness, WDR level, privacy masking zones, exposure mode (indoor/outdoor/night/low noise/moving/customize 1 to 3)
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	0 °C to 60 °C (32 °F to 140 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: 100 V to 240 V AC, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (W × H × L)	56 mm × 68 mm × 125 mm (2.20 in × 2.68 in × 4.92 in)
Protection Rating	-
Related Products	-

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TSND2502

Full HD IP66 Vandal Dome Type Network Camera

Outdoor dome, 1080p real time, H.264/MPEG-4/MJPEG, 2-way audio, IP66, vandal proof, IR illuminator with distance up to 20 m, SD card, day and night ICR, 3GPP, dual voltage/PoE, with computar® megapixel lens (f = 3 to 9 mm vari-focal auto iris)



Features

- IP66, NEMA-4X enclosure rating
- Full HD 1080p multi streaming
- 1/2.7-inch OmniVision 2-megapixel CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- IP66, NEMA-4X enclosure rating
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Operating temperature range from -40 °C to 50 °C (-40 °F to 122 °F)
- Integrated adaptive IR illumination
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSND2502
Type	Indoor/Outdoor, dome camera
Image Sensor	1/2.7-inch OmniVision 2-megapixel CMOS image sensor
Lens	Computar® f = 3 to 9 mm vari-focal DC auto iris
Effective Pixels	1920 × 1080
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s

Model	TSND2502
White Balance	Manual/AWB/ATW
Video Compression	H.264/MPEG-4/MJPEG
Video Streaming Resolutions	Simultaneous
Resolutions	Full HD 1080p/HD 720p/D1/CIF
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 1920 × 1080 pixels • NTSC: maximum 30 frames per second at 1920 × 1080 pixels
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	<ul style="list-style-type: none"> • 12 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 10 m to 20 m (32.8 ft to 65.6 ft)
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	-40 °C to 50 °C (-40 °F to 122 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: 100 V to 240 V AC, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (Ø × H)	123 mm × 150 mm (4.84 in × 5.91 in)
Protection Rating	IP66, NEMA-4X enclosure rating
Related Products	<ul style="list-style-type: none"> • TSAB-2000: Surface Mount • TSAB-2100: Gooseneck Arm Mount • TSAB-2200: Glush Mount • TSAB-2300: Surface Mount • TSAB-2400: Corner Mount • TSAB-2500: Electronical Box for Pendant Mount • TSAB-2600: Wall Mount • TSAB-2700: Pole Mount, 17 cm to 120 cm (6.69 in to 47.24 in)

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TSND2704

3-megapixel WDR IP66 Vandal Dome Type Network Camera

Outdoor dome, 3-megapixel 15 fps, H.264/MPEG-4/MJPEG, 2-way audio, IP66, vandal proof, IR illuminator with distance up to 20 m, SD card, day and night ICR, 3GPP, dual voltage/PoE, WDR, with computar® megapixel lens (f = 3 to 9 mm vari-focal auto iris)



Features

- IP66, NEMA-4X enclosure rating
- 3-megapixel multi streaming
- 1/2.8-inch Sony IMX036 CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Operating temperature range from -40 °C to 50 °C (-40 °F to 122 °F)
- Integrated adaptive IR illumination
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSND2704
Type	Indoor/Outdoor, dome camera
Image Sensor	1/2.8-inch Sony IMX036 CMOS image sensor
Lens	Computar® f = 3 to 9 mm vari-focal DC auto iris
Effective Pixels	2048 × 1536
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s

Model	TSND2704
White Balance	Manual/AWB/ATW
Video Compression	H.264/MPEG-4/MJPEG
Video Streaming	Simultaneous
Resolutions	2048 × 1536 pixels/full HD 1080p/HD 720p/D1/CIF
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 2048 × 1536 pixels • NTSC: maximum 30 frames per second at 2048 × 1536 pixels
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	<ul style="list-style-type: none"> • 12 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 10 m to 20 m (32.8 ft to 65.6 ft)
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	-40 °C to 50 °C (-40 °F to 122 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: 100 V to 240 V AC, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (Ø × H)	123 mm × 150 mm (4.84 in × 5.91 in)
Protection Rating	IP66, NEMA-4X enclosure rating
Related Products	<ul style="list-style-type: none"> • TSAB-2000: Surface Mount • TSAB-2100: Gooseneck Arm Mount • TSAB-2200: Glush Mount • TSAB-2300: Surface Mount • TSAB-2400: Corner Mount • TSAB-2500: Electronical Box for Pendant Mount • TSAB-2600: Wall Mount • TSAB-2700: Pole Mount, 17 cm to 120 cm (6.69 in to 47.24 in)

*Design and specifications are subject to change without prior notice.

TSND4501

Full HD Indoor Dome Type Network Camera

Indoor dome, 1080p real time, H.264/MPEG-4/MJPEG, 2-way audio, day and night ICR, 3GPP, dual voltage/PoE, with computar® megapixel lens (f = 3 to 9 mm vari-focal auto iris)



Features

- Full HD 1080p multi streaming
- 1/2.7-inch OmniVision 2-megapixel CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Integrated adaptive IR illumination
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSND4501
Type	Indoor, dome camera
Image Sensor	1/2.7-inch OmniVision 2-megapixel CMOS image sensor
Lens	Computar® f = 3 to 9 mm vari-focal DC auto iris
Effective Pixels	1920 × 1080
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s
White Balance	Manual/AWB/ATW
Video Compression	H.264/MPEG-4/MJPEG
Video Streaming	Simultaneous

Model	TSND4501
Resolutions	Full HD 1080p/HD 720p/D1/CIF
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 1920 × 1080 pixels • NTSC: maximum 30 frames per second at 1920 × 1080 pixels
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	<ul style="list-style-type: none"> • 12 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 10 m to 20 m (32.8 ft to 65.6 ft)
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	0 °C to 60 °C (32 °F to 140 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: 100 V to 240 V AC, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (Ø × H)	123 mm × 150 mm (4.84 in × 5.91 in)
Protection Rating	-
Related Products	<ul style="list-style-type: none"> • TSAB-2000: Surface Mount • TSAB-2100: Gooseneck Arm Mount • TSAB-2200: Glush Mount • TSAB-2300: Surface Mount • TSAB-2400: Corner Mount • TSAB-2500: Electronical Box for Pendant Mount • TSAB-2600: Wall Mount • TSAB-2700: Pole Mount, 17 cm to 120 cm (6.69 in to 47.24 in)

*Design and specifications are subject to change without prior notice.

TSND4703

3-megapixel WDR Indoor Dome Type Network Camera

Indoor dome, 3-megapixel 15 fps, H.264/MPEG-4/MJPEG, 2-way audio, SD card, day and night ICR, 3GPP, dual voltage/PoE, WDR, with computar® megapixel lens (f = 3 to 9 mm vari-focal auto iris)



Features

- 3-megapixel multi streaming
- 1/2.8-inch Sony IMX036 CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Integrated adaptive IR illumination
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSND4703
Type	Indoor, dome camera
Image Sensor	1/2.8-inch Sony IMX036 CMOS image sensor
Lens	Computar® f = 3 to 9 mm vari-focal DC auto iris
Effective Pixels	2048 × 1536
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s
White Balance	Manual/AWB/ATW
Video Compression	H.264/MPEG-4/MJPEG

Model	TSND4703
Video Streaming	Simultaneous
Resolutions	2048 × 1536 pixels/full HD 1080p/HD 720p/D1/CIF
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 2048 × 1536 pixels • NTSC: maximum 30 frames per second at 2048 × 1536 pixels
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	<ul style="list-style-type: none"> • 12 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 10 m to 20 m (32.8 ft to 65.6 ft)
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	0 °C to 60 °C (32 °F to 140 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: 100 V to 240 V AC, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (Ø × H)	123 mm × 150 mm (4.84 in × 5.91 in)
Protection Rating	-
Related Products	<ul style="list-style-type: none"> • TSAB-2000: Surface Mount • TSAB-2100: Gooseneck Arm Mount • TSAB-2200: Glush Mount • TSAB-2300: Surface Mount • TSAB-2400: Corner Mount • TSAB-2500: Electronical Box for Pendant Mount • TSAB-2600: Wall Mount • TSAB-2700: Pole Mount, 17 cm to 120 cm (6.69 in to 47.24 in)

*Design and specifications are subject to change without prior notice.

TSNP2501

Full HD 20X Speed Dome Network Camera

Speed dome, 1080p real time, H.264/MJPEG, 20X zoom lens, IP66, vandal proof, SD card



Features

- Full HD 1080p multi streaming
- IK10 (20J) vandal resistant
- IP67, NEMA-6 enclosure rating
- 1.7 lux minimum illumination in color mode and 0.3 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Wide dynamic range (WDR)
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Operating temperature range from -40 °C to 50 °C (-40 °F to 122 °F)
- ONVIF compliant
- 240X zoom (20X optional zoom, 12X digital zoom)
- Automatic removable IR cut filter for IR sensitivity at night

Tech Specs

Model	TSNP2501
Type	Indoor/Outdoor, IP67, IK10, PTZ Cameras
Image Sensor	1/3-inch 2-megapixel COMS image sensor
Lens	<ul style="list-style-type: none"> • 20X optical zoom, f = 4.7 mm (wide) to 94.0 mm (tele), F1.6 to F3.5 • Field of view: 55.4° (wide), 2.9° (tele) at full HD mode
Effective Pixels	1920 × 1080
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 1.7 lux at F 1.6, 50 IRE • Black and white mode: 0.3 lux at F 1.6, 50 IRE
Electronic Shutter Range	1 s to 1/10000 s

Model	TSNP2501
White Balance	Auto/ATW/Indoor/Outdoor/Push lock
Video	H.264/MJPEG
Compression	
Resolutions	1080p/720p/480p/VGA/QVGA/CIF
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 1920 × 1080 pixels • NTSC: maximum 30 frames per second at 1920 × 1080 pixels
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Pan/Tilt/Zoom	<ul style="list-style-type: none"> • Pan range: 360° continuous • Tilt range: indoor 85°/outdoor 92° • Manual pan speed: 0.1°/s to 90°/s • Manual tilt speed: 0.1°/s to 45°/s, 0.1°/s • Pre-position pan speed: maximum 430°/s • Pre-position tilt speed: maximum 200°/s • Proportional pan/tilt: on/off • Zoom limit: 20X/40X/80X/160X/240X • Programmable presets: 64 • Auto patrol group: 4 • Privacy masking zones: 8 zones • Stop time: 3 s to 60 s • Scan function: auto/random/frame • Recovery time limit: off, 1 min to 120 min • Freeze activity: on/off • Alarm: input × 6/output × 1
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	TCP/IP, UDP, HTTP, SMTP, DNS, DHCP, NTP, DDNS, FTPc, FTPs, IC MP, Upnp, IGMPv3, RTSP, RTCP, RTP, ARP
Operating Ambient Temperature	-40 °C to 50 °C (-40 °F to 122 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	24 V AC/PoE (IEEE 802.3af)
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Dimensions (Ø × H)	216.6 mm × 324.0 mm (8.53 in × 12.8 in)
Protection Rating	<ul style="list-style-type: none"> • IP67, NEMA-6 enclosure rating • IK10 (20J) vandal resistant

*Design and specifications are subject to change without prior notice.

TSNU1501

Full HD IP66 Bullet Type Network Camera with Quick Installation Bracket

Bullet, 1080p real time, H.264/MPEG-4/MJPEG, 2-way audio, IP66, vandal proof, SD card, day and night ICR, 3GPP, dual voltage/PoE, f = 3 to 9 mm computer@ vari-focal auto iris lens



Features

- IP66, NEMA-4X enclosure rating
- Full HD 1080p multi streaming
- 1/2.7-inch OmniVision 2-megapixel CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Operating temperature range from -40 °C to 50 °C (-40 °F to 122 °F)
- Integrated adaptive IR illumination
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSNU1501
Type	Indoor/Outdoor, bullet camera
Image Sensor	1/2.7-inch OmniVision 2-megapixel CMOS image sensor
Lens	f = 3 to 9 mm vari-focal DC auto iris
Effective Pixels	1920 × 1080
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s
White Balance	Manual/AWB/ATW

Model	TSNU1501
Video Compression	H.264/MPEG-4/MJPEG
Video Streaming	Simultaneous
Resolutions	Full HD 1080p/HD 720p/D1/CIF
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 1920 × 1080 pixels • NTSC: maximum 30 frames per second at 1920 × 1080 pixels
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	<ul style="list-style-type: none"> • 12 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 30 m (98.42 ft)
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	-40 °C to 50 °C (-40 °F to 122 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: 100 V to 240 V AC, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (W × H × L)	92 mm × 97 mm × 226 mm (3.62 in × 3.82 in × 8.90 in)
Protection Rating	IP66, NEMA-4X enclosure rating
Related Products	-

*Design and specifications are subject to change without prior notice.

TSNU1502

Full HD IP66 Bullet Type Network Camera

Bullet, 1080p real time, H.264/MPEG-4/MJPEG, 2-way audio, IP66, vandal proof, SD card, day and night ICR, 3GPP, dual voltage/PoE, with megapixel lens (f = 2.8 to 12 mm, F1.2 vari-focal IR corrected auto iris)



Features

- Included F 1.2, f = 2.8 to 12 mm vari-focal DC auto iris lens
- IP66, NEMA-4X enclosure rating
- Full HD 1080p multi streaming
- 1/2.7-inch OmniVision 2-megapixel CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Operating temperature range from -40 °C to 50 °C (-40 °F to 122 °F)
- Integrated adaptive IR illumination
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSNU1502
Type	Indoor/Outdoor, bullet camera
Image Sensor	1/2.7-inch OmniVision 2-megapixel CMOS image sensor
Lens	F 1.2, f = 2.8 to 12 mm vari-focal DC auto iris
Effective Pixels	1920 × 1080
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s
White Balance	Manual/AWB/ATW

Model	TSNU1502
Video Compression	H.264/MPEG-4/MJPEG
Video Streaming	Simultaneous
Resolutions	Full HD 1080p/HD 720p/D1/CIF
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 2048 × 1536 pixels • NTSC: maximum 30 frames per second at 2048 × 1536 pixels
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	<ul style="list-style-type: none"> • 42 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 70 m (229.66 ft)
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	-40 °C to 50 °C (-40 °F to 122 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: 100 V to 240 V AC, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (W × H × L)	147 mm × 115 mm × 190 mm (5.79 in × 4.53 in × 7.48 in)
Protection Rating	IP66, NEMA-4X enclosure rating
Related Products	-

*Design and specifications are subject to change without prior notice.

TSNU1703

3-megapixel WDR IP66 Bullet Type Network Camera with Quick Installation Bracket

Bullet, 3-megapixel 15 fps, H.264/MPEG-4/MJPEG, 2-way audio, SD card, day and night ICR, 3GPP, dual voltage/PoE, WDR, with computar® megapixel lens (f = 3 to 9 mm vari-focal auto iris)



Features

- IP66, NEMA-4X enclosure rating
- 3-megapixel multi streaming
- 1/2.8-inch Sony IMX036 CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Operating temperature range from -40 °C to 50 °C (-40 °F to 122 °F)
- Integrated adaptive IR illumination
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSNU1703
Type	Indoor/Outdoor, bullet camera
Image Sensor	1/2.8-inch Sony IMX036 CMOS image sensor
Lens	f = 3 to 9 mm vari-focal DC auto iris
Effective Pixels	2048 × 1536
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s
White Balance	Manual/AWB/ATW

Model	TSNU1703
Video Compression	H.264/MPEG-4/MJPEG
Video Streaming	Simultaneous
Resolutions	2048 × 1536 pixels/Full HD 1080p/HD 720p/D1/CIF
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 1920 × 1080 pixels • NTSC: maximum 30 frames per second at 1920 × 1080 pixels
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	<ul style="list-style-type: none"> • 12 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 30 m (98.42 ft)
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	-40 °C to 50 °C (-40 °F to 122 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: 100 V to 240 V AC, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (W × H × L)	92 mm × 97 mm × 226 mm (3.62 in × 3.82 in × 8.90 in)
Protection Rating	IP66, NEMA-4X enclosure rating
Related Products	-

*Design and specifications are subject to change without prior notice.

TSNU1704

3-megapixel WDR IP66 Bullet Type Network Camera

Bullet, 3-megapixel 15 fps, H.264/MPEG-4/MJPEG, 2-way audio, SD card, day and night ICR, 3GPP, dual voltage/PoE, WDR, with megapixel lens (f = 2.8 to 12 mm, F1.2 vari-focal IR corrected auto iris)



Features

- Included F 1.2, f = 2.8 to 12 mm vari-focal DC auto iris lens
- IP66, NEMA-4X enclosure rating
- 3-megapixel multi streaming
- 1/2.8-inch Sony IMX036 CMOS image sensor
- 0.2 lux minimum illumination in color mode and 0.01 lux minimum illumination in black and white mode
- H.264/MPEG-4/MJPEG compression
- Motion detection
- 2-way audio
- Built-in SD/SDHC memory card slot
- Power over Ethernet (PoE), IEEE 802.3af
- Operating temperature range from -40 °C to 50 °C (-40 °F to 122 °F)
- Integrated adaptive IR illumination
- Automatic removable IR cut filter for IR sensitivity at night
- ONVIF compliant

Tech Specs

Model	TSNU1704
Type	Indoor/Outdoor, bullet camera
Image Sensor	1/2.8-inch Sony IMX036 CMOS image sensor
Lens	F 1.2, f = 2.8 to 12 mm vari-focal DC auto iris
Effective Pixels	2048 × 1536
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.2 lux at F 1.2 • Black and white mode: 0.01 lux at F 1.2
Electronic Shutter Range	1 s to 1/10000 s

Model	TSNU1704
White Balance	Manual/AWB/ATW
Video Compression	H.264/MPEG-4/MJPEG
Video Streaming	Simultaneous
Resolutions	2048 × 1536 pixels/Full HD 1080p/HD 720p/D1/CIF
Frame Rate	Maximum 15 frames per second (2048 × 1536 pixels)
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	<ul style="list-style-type: none"> • 42 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 70 m (229.66 ft)
Day and Night Mode	Color/Black and white/Auto/External
Image Settings	Brightness (manual/AGC), exposure time, mirror, flip, white balance, contrast, saturation, sharpness, privacy masking zones
Audio	<ul style="list-style-type: none"> • 2-way audio: input × 1/output (Ø 3.5 mm stereo mini-jack) × 1 • Compression: G.711 ?-law 64 kbps/G.726 32 kbps
Alarm	<ul style="list-style-type: none"> • Recording: SD/SDHC card, SAMBA, FTP • Pre-alarm recording • Motion detection: 512 zones, Sensitivity: 0 % to 100 % • Trigger: motion detection, schedule, alarm input, ethernet loss, network/remote digital alarm input • SD/SDHC card recording, HTTP, FTP, SMTP, alarm output
Connectors	<ul style="list-style-type: none"> • RJ-45 10BASE-T/100BASE-TX × 1 • Digital I/O: digital input × 2, digital output × 2, DC output (12 V DC) × 1, ground × 1 • Ø 3.5 mm stereo mini-jack × 2: audio in (microphone in/line in) × 1, audio out × 1 • Reset: reset to factory default • SD/SDHC memory card slot × 1 • USB 2.0 port × 1
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Operating Ambient Temperature	0 °C to 60 °C (32 °F to 140 °F)
Relative Humidity	10 % to 90 % noncondensing
Input Power	12 V DC/PoE (IEEE 802.3af)/24 V AC
Certifications	ONVIF, CE, FCC, RoHS, C-tick
Included Accessories	<ul style="list-style-type: none"> • Installation guide × 1 • CD (includes user guide) × 1 • Power adaptor (input: 100 V to 240 V AC, 50/60 Hz, output: 12 V DC, 1 A) × 1 • RJ-45 cable × 1
Dimensions (W × H × L)	147 mm × 115 mm × 190 mm (5.79 in × 4.53 in × 7.48 in)
Protection Rating	IP66, NEMA-4X enclosure rating
Related Products	-

*Design and specifications are subject to change without prior notice.