

# 2013



# Network Surveillance

<http://www.tsict.com>

## 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



Model	TSNB4501
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• 0 °C to 60 °C (32 °F to 140 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide × 1</li> <li>• CD (includes users manual) × 1</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1</li> <li>• RJ-45 cable × 1</li> </ul>
<b>Dimensions (H × W × L)</b>	56 mm × 68 mm × 125 mm (2.20 in × 2.68 in × 4.92 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	-

### Features

- Full HD 1080p multi streaming
- H.264/MPEG-4/MJPEG compression
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F 1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- ONVIF support

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

### Tech Specs

Model	TSNB4501
<b>Camera Type</b>	Indoor box camera
<b>Image Sensor</b>	1/2.7-inch OmniVision 2-megapixel CMOS sensor
<b>Lens Type</b>	<ul style="list-style-type: none"> <li>• CS/C mount (with adaptor ring)</li> <li>• DC iris suport</li> </ul>
<b>Effective Pixels</b>	1920 × 1080
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	Full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 1920 × 1080 pixels (25 frames per second for PAL, 30 frames per second for NTSC)
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip, white balance, brightness, contrast, saturation, sharpness, privacy masks

## 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

- Embedded with 4X lens
- Full HD 1080p multi streaming
- H.264/MPEG-4/MJPEG compression
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F 1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- ONVIF support

### Tech Specs

Model	TSNB4502
<b>Camera Type</b>	Indoor box camera with-megapixel lens
<b>Image Sensor</b>	1/2.7-inch OmniVision 2-megapixel CMOS sensor
<b>Lens Type</b>	<ul style="list-style-type: none"> <li>• f = 2.8 to 12 mm</li> <li>• F 1.2 vari-focal auto iris DC drive lens</li> </ul>
<b>Effective Pixels</b>	1920 × 1080
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	Full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 1920 × 1080 pixels (25 frames per second for PAL, 30 frames per second for NTSC)
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip,

Model	TSNB4502
	white balance, brightness, contrast, saturation, sharpness, privacy masks
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> <li>• USB: A-type (2.0)</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• 0 °C to 60 °C (32 °F to 140 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide × 1</li> <li>• CD (includes users manual) × 1</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1</li> <li>• RJ-45 cable × 1</li> </ul>
<b>Dimensions (H × W × L)</b>	56 mm × 68 mm × 125 mm (2.20 in × 2.68 in × 4.92 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	-

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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



Model	TSNB4703
	<ul style="list-style-type: none"> <li>jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> <li>• USB: A-type (2.0)</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• 0 °C to 60 °C (32 °F to 140 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide × 1</li> <li>• CD (includes users manual) × 1</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1</li> <li>• RJ-45 cable × 1</li> </ul>
<b>Dimensions (H × W × L)</b>	56 mm × 68 mm × 125 mm (2.20 in × 2.68 in × 4.92 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	-

## Features

- 3-megapixel multi streaming
- H.264/MPEG-4/MJPEG compression
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- ONVIF support

## Tech Specs

Model	TSNB4703
<b>Camera Type</b>	Indoor box camera with-megapixel lens
<b>Image Sensor</b>	1/2.8-inch Sony IMX036 CMOS sensor
<b>Lens Type</b>	<ul style="list-style-type: none"> <li>• f = 2.8 to 12 mm</li> <li>• F 1.2 vari-focal auto iris DC drive lens</li> </ul>
<b>Effective Pixels</b>	2048 × 1536
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	2048 × 1536 pixels/Full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 2048 × 1536 pixels (15 frames per second)
<b>Image Setting</b>	Brightness, contrast, saturation, sharpness, WDR level, privacy masks; Exposure Mode: indoor, outdoor, night, low noise, moving, customize 1 to 3, schedule.
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone</li> </ul>

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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)



Model	TSNB4704
	privacy masks; Exposure Mode: indoor, outdoor, night, low noise, moving, customize 1 to 3, schedule.
<b>Audio</b>	<ul style="list-style-type: none"> <li>2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>Recording (SD card, SAMBA, FTP)</li> <li>Pre-alarm recording</li> <li>Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>RJ-45 10/100 Mbps Ethernet</li> <li>Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>Reset: reset for factory default</li> <li>Local storage device: SD/SDHC card slot</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>0 °C to 60 °C (32 °F to 140 °F)</li> <li>Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>Installation guide, CD × 1 (includes users manual)</li> <li>Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A), RJ-45 cable × 1</li> </ul>
<b>Dimensions (H × W × L)</b>	56 mm × 68 mm × 125 mm (2.20 in × 2.68 in × 4.92 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	-

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

## Features

- Embedded with 4X lens
- 3-megapixel multi streaming
- H.264/MPEG-4/MJPEG compression
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- ONVIF support

## Tech Specs

Model	TSNB4704
<b>Camera Type</b>	Indoor box camera
<b>Image Sensor</b>	1/2.8-inch Sony IMX036 CMOS sensor
<b>Lens Type</b>	<ul style="list-style-type: none"> <li>CS/C mount (with adaptor ring)</li> <li>DC iris support (D4 connector)</li> </ul>
<b>Effective Pixels</b>	2048 × 1536
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>Color: 0.2 lux at F 1.2</li> <li>Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	2048 × 1536 pixels/Full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 2048 × 1536 pixels (15 frames per second)
<b>Image Setting</b>	Brightness, contrast, saturation, sharpness, WDR level,

## 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

- Full HD 1080p multi streaming
- Vandal Proof
- IP66
- H.264/MPEG-4/MJPEG compression
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- Support -40 °C to 50 °C (-40 °F to 122 °F)
- ONVIF support

### Tech Specs

Model	TSND2502
<b>Camera Type</b>	IP66 outdoor dome camera
<b>Image Sensor</b>	1/2.7-inch OmniVision 2-megapixel CMOS sensor
<b>Lens Type</b>	Computar f = 3 to 9 mm vari-focal auto-iris DC drive
<b>Effective Pixels</b>	1920 × 1080
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	Full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 1920 × 1080 pixels (25 frames per second for

Model	TSND2502
	PAL, 30 frames per second for NTSC)
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip, white balance, brightness, contrast, saturation, sharpness, privacy masks
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• -40 °C to 50 °C (-40 °F to 122 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide, CD × 1 (includes users manual)</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A), RJ-45 cable × 1</li> </ul>
<b>Dimensions (Ø × H)</b>	123 mm × 150 mm (4.84 in × 5.91 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	<ul style="list-style-type: none"> <li>• TSAB-2000: surface mount</li> <li>• TSAB-2100: gooseneck arm mount</li> <li>• TSAB-2200: gush mount</li> <li>• TSAB-2300: surface mount</li> <li>• TSAB-2400: corner mount</li> <li>• TSAB-2500: electrical box for pendant mount</li> <li>• TSAB-2600: wall mount</li> <li>• TSAB-2700: pole mount, 17 cm to 120 cm (6.69 in to 47.24 in)</li> </ul>

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

# 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

- 3-megapixel multi streaming
- Vandal proof
- IP66
- H.264/MPEG-4/MJPEG compression
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F 1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- Support -40 °C to 50 °C (-40 °F to 122 °F)
- IP66
- ONVIF support

### Tech Specs

Model	TSND2704
<b>Camera Type</b>	IP66 outdoor dome camera
<b>Image Sensor</b>	1/2.8-inch Sony IMX036 CMOS sensor
<b>Lens Type</b>	Computar f = 3 to 9 mm vari-focal auto-iris DC drive
<b>Effective Pixels</b>	2048 × 1536
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous

Model	TSND2704
<b>Resolution</b>	2048 × 1536 pixels/full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 2048 × 1536 pixels (25 frames per second for PAL, 30 frames per second for NTSC)
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip, white balance, brightness, contrast, saturation, sharpness, privacy masks
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• -40 °C to 50 °C (-40 °F to 122 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide × 1</li> <li>• CD (includes users manual) × 1</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1</li> <li>• RJ-45 cable × 1</li> </ul>
<b>Dimensions (Ø × H)</b>	123 mm × 150 mm (4.84 in × 5.91 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	<ul style="list-style-type: none"> <li>• TSAB-2000: surface mount</li> <li>• TSAB-2100: gooseneck arm mount</li> <li>• TSAB-2200: flush mount</li> <li>• TSAB-2300: surface mount</li> <li>• TSAB-2400: corner mount</li> <li>• TSAB-2500: electrical box for pendant mount</li> <li>• TSAB-2600: wall mount</li> <li>• TSAB-2700: pole mount, 17 cm to 120 cm (6.69 in to 47.24 in)</li> </ul>

\*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
- H.264/MPEG-4/MJPEG compression
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F 1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- ONVIF support

### Tech Specs

Model	TSND4501
<b>Camera Type</b>	Indoor dome camera
<b>Image Sensor</b>	1/2.7-inch OmniVision 2-megapixel CMOS sensor
<b>Lens Type</b>	Computar f = 3 to 9 mm vari-focal auto-iris DC drive
<b>Effective Pixels</b>	1920 × 1080
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	Full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 1920 × 1080 pixels (25 frames per second for PAL, 30 frames per second for NTSC)
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip, white balance, brightness, contrast, saturation, sharpness, privacy masks

Model	TSND4501
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• 0 °C to 60 °C (32 °F to 140 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide, CD × 1 (includes users manual)</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A), RJ-45 cable × 1</li> </ul>
<b>Dimensions (Ø × H)</b>	123 mm × 150 mm (4.84 in × 5.91 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	<ul style="list-style-type: none"> <li>• TSAB-2000: surface mount</li> <li>• TSAB-2100: gooseneck arm mount</li> <li>• TSAB-2200: flush mount</li> <li>• TSAB-2300: surface mount</li> <li>• TSAB-2400: corner mount</li> <li>• TSAB-2500: electrical box for pendant mount</li> <li>• TSAB-2600: wall mount</li> <li>• TSAB-2700: pole mount, 17 cm to 120 cm (6.69 in to 47.24 in)</li> </ul>

\*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
- H.264/MPEG-4/MJPEG compression
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F 1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- ONVIF support

### Tech Specs

Model	TSND4703
<b>Camera Type</b>	Indoor dome camera
<b>Image Sensor</b>	1/2.8-inch Sony IMX036 CMOS sensor
<b>Lens Type</b>	Computar f = 3 to 9 mm vari-focal auto-iris DC drive
<b>Effective Pixels</b>	2048 × 1536
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	2048 × 1536 pixels/full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 2048 × 1536 pixels (25 frames per second for PAL, 30 frames per second for NTSC)
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip, white balance, brightness, contrast, saturation, sharpness,

Model	TSND4703
	privacy masks
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• 0 °C to 60 °C (32 °F to 140 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide × 1</li> <li>• CD (includes users manual) × 1</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1</li> <li>• RJ-45 cable × 1</li> </ul>
<b>Dimensions (Ø × H)</b>	123 mm × 150 mm (4.84 in × 5.91 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	<ul style="list-style-type: none"> <li>• TSAB-2000: surface mount</li> <li>• TSAB-2100: gooseneck arm mount</li> <li>• TSAB-2200: flush mount</li> <li>• TSAB-2300: surface mount</li> <li>• TSAB-2400: corner mount</li> <li>• TSAB-2500: electrical box for pendant mount</li> <li>• TSAB-2600: wall mount</li> <li>• TSAB-2700: pole mount, 17 cm to 120 cm (6.69 in to 47.24 in)</li> </ul>

\*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 Computar vari-focal auto iris lens



### Features

- Full HD 1080p multi streaming Vandal Proof
- H.264/MPEG-4/MJPEG compression
- Vandal Proof
- IP66
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F 1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- Support -40 °C to 50 °C (-40 °F to 122 °F)
- ONVIF support

### Tech Specs

Model	TSNU1501
<b>Camera Type</b>	IP66 outdoor bullet camera
<b>Image Sensor</b>	1/2.7-inch OmniVision 2-megapixel CMOS sensor
<b>Lens Type</b>	f = 3 to 9 mm vari-focal auto iris DC drive
<b>Effective Pixels</b>	1920 × 1080
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	Full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 1920 × 1080 pixels (25 frames per second for

Model	TSNU1501
	PAL, 30 frames per second for NTSC)
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip, white balance, brightness, contrast, saturation, sharpness, privacy masks
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• -40 °C to 50 °C (-40 °F to 122 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide × 1</li> <li>• CD (includes users manual) × 1</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1</li> <li>• RJ-45 cable × 1</li> </ul>
<b>Dimensions (H × W × L)</b>	92 mm × 97 mm × 226 mm (3.62 in × 3.82 in × 8.90 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	-

\*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

- Full HD 1080p multi streaming
- H.264/MPEG-4/MJPEG compression
- Embedded with 4X lens
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F 1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- Support -40 °C to 50 °C (-40 °F to 122 °F)
- ONVIF support

### Tech Specs

Model	TSNU1502
<b>Camera Type</b>	IP66 outdoor bullet camera
<b>Image Sensor</b>	1/2.7-inch OmniVision 2-megapixel CMOS sensor
<b>Lens Type</b>	<ul style="list-style-type: none"> <li>• f = 2.8 to 12 mm</li> <li>• F 1.2 vari-focal auto iris DC drive lens</li> </ul>
<b>Effective Pixels</b>	1920 × 1080
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	Full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 2048 × 1536 pixels (25 frames per second for PAL, 30 frames per second for NTSC)

Model	TSNU1502
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip, white balance, brightness, contrast, saturation, sharpness, privacy masks
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• -40 °C to 50 °C (-40 °F to 122 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide × 1</li> <li>• CD (includes users manual) × 1</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1</li> <li>• RJ-45 cable × 1</li> </ul>
<b>Dimensions (H × W × L)</b>	147 mm × 115 mm × 190 mm (5.79 in × 4.53 in × 7.48 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	-

\*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

- 3-megapixel multi streaming
- H.264/MPEG-4/MJPEG compression
- Vandal proof
- IP66
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F 1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- Support -40 °C to 50 °C (-40 °F to 122 °F)
- ONVIF support

## Tech Specs

Model	TSNU1703
<b>Camera Type</b>	IP66 outdoor bullet camera
<b>Image Sensor</b>	1/2.8-inch Sony IMX036 CMOS sensor
<b>Lens Type</b>	f = 3 to 9 mm vari-focal auto iris DC drive
<b>Effective Pixels</b>	2048 × 1536
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	2048 × 1536 pixels/Full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 1920 × 1080 pixels (25 frames per second for

Model	TSNU1703
	PAL, 30 frames per second for NTSC)
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip, white balance, brightness, contrast, saturation, sharpness, privacy masks
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• -40 °C to 50 °C (-40 °F to 122 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide × 1</li> <li>• CD (includes users manual) × 1</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1</li> <li>• RJ-45 cable × 1</li> </ul>
<b>Dimensions (H × W × L)</b>	92 mm × 97 mm × 226 mm (3.62 in × 3.82 in × 8.90 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	-

\*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)



Model	TSNU1704
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip, white balance, brightness, contrast, saturation, sharpness, privacy masks
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> <li>• USB: A-type (2.0)</li> </ul>
<b>Protocol</b>	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, and ONVIF
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• 0 °C to 60 °C (32 °F to 140 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	12 V DC/PoE (IEEE 802.3af)/24 V AC
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	<ul style="list-style-type: none"> <li>• Installation guide × 1</li> <li>• CD (includes users manual) × 1</li> <li>• Power adaptor (input: AC 100 V to 240 V, 50/60 Hz, output: 12 V DC, 1 A) × 1</li> <li>• RJ-45 cable × 1</li> </ul>
<b>Dimensions (H × W × L)</b>	147 mm × 115 mm × 190 mm (5.79 in × 4.53 in × 7.48 in)
<b>Vandal Proof</b>	-
<b>PTZ</b>	-
<b>Brackets</b>	-

## Features

- 3-megapixel multi streaming
- H.264/MPEG-4/MJPEG compression
- Embedded with 4X lens
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- Support -40 °C to 50 °C (-40 °F to 122 °F)
- ONVIF support

## Tech Specs

Model	TSNU1704
<b>Camera Type</b>	IP66 outdoor bullet camera
<b>Image Sensor</b>	1/2.8-inch Sony IMX036 CMOS sensor
<b>Lens Type</b>	<ul style="list-style-type: none"> <li>• f = 2.8 to 12 mm</li> <li>• F 1.2 vari-focal auto iris DC drive lens</li> </ul>
<b>Effective Pixels</b>	2048 × 1536
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Color: 0.2 lux at F 1.2</li> <li>• Black and white: 0.01 lux at F 1.2</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s
<b>White Balance</b>	Manual/AWB/ATW
<b>Video Compression</b>	H.264/MPEG-4/MJPEG
<b>Video Streaming</b>	Simultaneous
<b>Resolution</b>	2048 × 1536 pixels/Full HD 1080p/HD 720p/D1/CIF
<b>Frame Rate</b>	Maximum 2048 × 1536 (15 frames per second)

\*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 vandal proof
- IP67
- H.264/MPEG-4/MJPEG compression
- Support WDR
- Advanced motion detection
- 0.2 lux at F 1.2; Black and white: 0.01 lux at F1.2
- 2-way audio
- Built-in SD/SDHL card slot for schedule and alarm recording
- PoE support
- Support -40 °C to 50 °C (-40 °F to 122 °F)
- ONVIF support
- 240X (20X optical), f = 4.7 to 94 mm
- Mechanical (ICR) day/night
- PTZ

### Tech Specs

Model	TSNP2501
<b>Camera Type</b>	IP67 & IK10 outdoor speed dome camera
<b>Image Sensor</b>	1/3-inch 2-megapixel COMS sensor
<b>Lens Type</b>	<ul style="list-style-type: none"> <li>• 20X optional zoom</li> <li>• f = 4.7 mm (wide) to 94.0 mm (tele)</li> <li>• F1.6 to 3.5</li> <li>• H: 55.4° (wide), 2.9° (tele) full HD mode</li> </ul>
<b>Effective Pixels</b>	1920 × 1080
<b>Min. Illumination</b>	<ul style="list-style-type: none"> <li>• Day mode: 1.7 lux at F 1.6, 50 IRE</li> <li>• Night mode: 0.3 lux at F 1.6, 50 IRE</li> </ul>
<b>Shutter Speed</b>	1 s to 1/10000 s

Model	TSNP2501
<b>White Balance</b>	Auto, ATW, indoor, outdoor, one-push
<b>Video Compression</b>	H.264/MJPEG
<b>Video Streaming</b>	Dual
<b>Resolution</b>	1080p/720p/480p/VGA/QVGA/CIF
<b>Frame Rate</b>	Maximum 1920 × 1080 pixels (25 frames per second for PAL, 30 frames per second for NTSC)
<b>Image Setting</b>	Brightness: manual, AGC, exposure time, mirror, flip, white balance, brightness, contrast, saturation, sharpness, privacy masks
<b>Audio</b>	<ul style="list-style-type: none"> <li>• 2-way audio: input × 1/output (3.5 mm earphone jack) × 1</li> <li>• Compression: G.711 u 64 kbps/G.726 32 kbps</li> </ul>
<b>Alarm</b>	<ul style="list-style-type: none"> <li>• Recording (SD card, SAMBA, FTP)</li> <li>• Pre-alarm recording</li> <li>• Advanced motion: (512 zones, Sensitivity: 0 % to 100 %)</li> <li>• Trigger: Motion detection, schedule, alarm input, Ethernet loss, network/remote digital alarm input</li> </ul>
<b>PTZ</b>	<ul style="list-style-type: none"> <li>• Pan range: 360° continuous</li> <li>• Tilt range: indoor 85°/outdoor 92°</li> <li>• Manual pan speed: 0.1°/s to 90°/s, 0.1°/s: maximum dig. zoom; 0.4°/s: maximum opt. zoom</li> <li>• Manual tilt speed: 0.1°/s to 45°/s, 0.1°/s: maximum dig. zoom; 0.4°/s: maximum opt. zoom</li> <li>• Preset speed pan: 430°/s (maximum), tilt: 200°/s (maximum)</li> <li>• Proportional P/T: on/off</li> <li>• Zoom limit: 20X/40X/80X/160X/240X</li> <li>• Programmable presets: 64</li> <li>• Auto patrol group: 4</li> <li>• Privacy masking on/off: 8 zones</li> <li>• Stop time: 3 s to 60 s</li> <li>• Scan function: auto/random/frame</li> <li>• Recover time limit: off, 1 min to 120 min</li> <li>• Freeze activity: on/off</li> <li>• Alarm: 6 inputs/1 output</li> </ul>
<b>Interface</b>	<ul style="list-style-type: none"> <li>• RJ-45 10/100 Mbps Ethernet</li> <li>• Digital I/O: digital input × 2/digital output × 2/DC output (12 V DC) × 1/ground × 1</li> <li>• Earphone jack: 3.5 mm × 2 (audio in (microphone in/line in) × 1, audio out × 1)</li> <li>• Reset: reset for factory default</li> <li>• Local storage device: SD/SDHC card slot</li> </ul>
<b>Protocol</b>	TCP/IP, UDP, HTTP, SMTP, DNS, DHCP, NTP, DDNS, FTPc, FTPs, ICMP, UPnP, IGMPv3, RTSP, RTP, ARP
<b>Operation Temperature</b>	<ul style="list-style-type: none"> <li>• -40 °C to 50 °C (-40 °F to 122 °F)</li> <li>• Humidity: 10 % to 90 %, no condensation</li> </ul>
<b>Power Source</b>	24 V AC/PoE (IEEE 802.3af)
<b>Regulatory</b>	ONVIF, CE, FCC, RoHS compliant, C-tick
<b>Accessories Included</b>	-
<b>Dimensions (Ø × L)</b>	216.6 mm × 324.0 mm (8.53 in × 12.8 in)
<b>Vandal Proof</b>	750 kg impact resistance
<b>Event Notification</b>	SD card recording, HTTP, FTP, SMTP, alarm output
<b>Brackets</b>	<ul style="list-style-type: none"> <li>• TSAB-2000: surface mount</li> <li>• TSAB-2100: gooseneck arm mount</li> <li>• TSAB-2200: flush mount</li> <li>• TSAB-2300: surface mount</li> <li>• TSAB-2400: corner mount</li> <li>• TSAB-2500: electrical box for pendant mount</li> <li>• TSAB-2600: wall mount</li> <li>• TSAB-2700: pole mount, 17 cm to 120 cm (6.69 in to 47.24 in)</li> </ul>

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