

TSPDTV4-TYXX SERIES

INNOVATIVE STAINLESS STEEL INNO 4K DAY/NIGHT AND THERMAL PTZ CAMERA STATION

SAFE AREA

- **INNOVATIVE PRODUCT, BEST IN CLASS TECHNOLOGY**
- AISI316L STAINLESS STEEL CONSTRUCTION
- VISIBLE: 4K (8MP), H.265, 22X AUTOFOCUS OPTICAL ZOOM
- THERMAL: 640X512 RESOLUTION, 9HZ OR 30HZ, LWIR
- DUAL INDEPENDENT VISIBLE AND THERMAL VIDEO STREAMS
- THERMAL RADIOMETRIC ANALYTICS OPTIONAL
- WIDE RANGE OF THERMAL LENSES
- EIS ELECTRONIC IMAGE STABILIZER (VISIBLE)
- INTEGRATED WINDOW WIPER (VISIBLE)
- VERY LOW POWER CONSUMPTION
- EASY MAINTENANCE
- IP66/67
- OPTIONAL BUILT-IN FIBER MEDIA CONVERTER
- OPTIONAL BUILT-IN 120VAC OR 230VAC POWER SUPPLY



TECHNICAL SPECIFICATIONS

GENERAL & MECHANICAL

Dimensions	See dimensions drawings
Operating Temperature	-60° +60°C, +75°C peak (-76°F +140°F, +167°F peak)
Construction	AISI316L Stainless Steel
Finish	Electro-polished
Window	Germanium HC coated 75mm (Thermal)
Mounting	4x Ø11 on 195 PCD
Cable entries	1x M25x1,5 (second cable entry available on demand)
Wiper	Yes (visible)
Pan Angle	360° (continuous rotation)
Pan Speed	0 – 40°/second
Pan Torque	20Nm (limited with safety device)
Tilt Angle	180° (+/-90°)
Tilt Speed	0 – 20°/second
Tilt Torque	20Nm (limited with safety device)
Rotation angle	Electronically adjustable limit switches
Backlash	<0,1°
Max preset accuracy	0,04°
Control protocol	Pelco D (RS485)
Weight	Unit: 40 Kg / Package: 45 Kg

ELECTRICAL

Temperature Climatization	
- Camera Housing	T[°C] ON = 12 ± 4°C, T[°C] OFF = 20 ± 3°C
- Gear motors	Electronically controlled de-icing
Available voltages	24VAC, 120VAC, 230VAC (+/-10%) 24VDC available on request
Power consumption	•12W min (stationary and heaters/wiper off) •87W Operating (no heaters) •170W MAX (low temperature operation)

CERTIFICATIONS

Ingress Protection	EN 60529 (IP66/IP67)
IK Classification	IK10 on all sides except for the front window
Vibrations and Shock	EN/IEC 60068-2-6; EN/IEC 60068-2-27
EMC	EN 55032; EN 55035; EN/IEC 61000-3-2; EN/IEC 61000-3-3; EN/IEC 61000-6-2; EN/IEC 61000-6-4; CISPR-32; CISPR-35
LVD	EN/IEC 62368-1
RoHS	2011/65/EU + 2015/863/EU (RoHS 3)
WEEE	2012/19/EU

CAMERA (DAY/NIGHT)

Sensor	1/1.8" Sony Progressive CMOS, 8MP
Resolution	- Up to 3864x2180, 4K (H.264/H.265) - Up to 1920x1080, 2MP (MJPEG)
Compression	H.265/H.264/MJPEG
Streaming	Up to 4 configurable streams
Frame Rate	- 2MP: 60fps (WDR off), 30 fps (WDR on) - 4K: 30fps (H.264/H.265)
Sensitivity	Color: 0.04 lux, B/W: 0.002 lux
Shutter Speed	1 to 1/10000 s
Optical Filter	Automatically removable IR-cut filter
White Balance	Contrast White Balance
Dynamic range	WDR/HDR
Lens	22x Optical Zoom Auto Focus, 10x Digital, focal Length 6.4-138.5 mm
FOV	Horizontal: 64° (Wide), 3° (Tele) Vertical: 37° (Wide), 2° (Tele)
Analytics	Motion Detection/Tampering. OPTIONAL: intrusion detection, wrong direction, object removal, sabotage, loitering, stopped vehicle, object counting
Image settings	Color, Brightness, Sharpness, Contrast, White Balance, Exposure control, 2D/3D Noise Reduction

INNOVATIVE STAINLESS STEEL INNO 4K DAY/NIGHT AND THERMAL PTZ CAMERA STATION

Event Triggers	External Input, Analytics, Network Failure Detection, Periodical Event, Manual Trigger
Event Actions	External Output Activation
Edge Recording	Micro SD/SDHC/SDXC (card not provided)
Network Storage	Support for recording to NAS
SNR	>50dB
Noise Reduction	3D Motion Compensated Noise Reduction
Iris	P-Iris, Auto-Iris
Image Stabilization	EIS

CAMERA (THERMAL)

Sensor	VOx Microbolometer, 17µm, uncooled
Resolution	640x512 pixels
Spectral Band	LWIR 7.5-13.5µm
Compression	Two independent channels of H.264 / H.265 or MJPEG
Streaming	Up to two streams
Frame Rate	9Hz (9fps) or 30Hz (30fps)
Focus Settings	Athermalized, focus-free
Sensitivity	<25mK (35mK Radiometric version) @ f/1.0
Shutter type	SSN - Silent Shutterless NUC™ for continuous image uniformity improvement
Edge Recording	microSD, up to 512GB (card not provided)
Gain	DDE Digital Detail Enhancement™
Analytics	Intrusion detection, region entrance, fence trespassing, Hot spots, fire detection (only for radiometric version)
Measurement accuracy	Target below 100°C (212°F) ±5°C (±9°F) accuracy Target below 150°C (302°F) ±5% accuracy Target above 150°C (302°F) ±15% accuracy Measured at 25°C (77°F) ambient temperature. Error may be greater at extreme temperatures (only for TRxx version)
Object temperature range	High Gain Mode: 0°C to 160°C (32°F to 320°F) Low Gain Mode: 0°C to 380°C (32°F to 716°F) Video analytics only functional in High Gain Mode (only for TRxx version)

LENS (THERMAL)

	FOV (HxV)	
	TTxx	TRxx (Radiometric)
7.5mm	90°x69°, F1.2	-
9mm	69°x56°, F1.4	69°x56°, F1.4
13mm	44°x36°, F1.0	44°x36°, F1.0
19mm	32°x26, F1.0	-
25mm	25°x18°, F1.1	25°x18°, F1.1
35mm	17°x14°, F1.1	17°x14°, F1.1
60mm	10°x8.2°, F1.2	-

NETWORK

Interface	100BASE-TX or 100BASE-FX/1000BASE-X (fiber)
Security	User Authentication/HTTPS/IEEE 802.1x
ONVIF	ONVIF profile S/T/G/M (visible), ONVIF S/G/T (thermal)
Protocols	IPv4/v6, TCP, UDP, RTSP, HTTP, HTTPS, FTP, DHCP, NTP

FIBER MEDIA CONVERTER

Interface	100 Base-FX/1000BASE-X
Cabling	Singlemode (9/125 µm) /two fibers/SC connector
Maximum Distance	20km
Wavelength	1310 nm

MODELS

TSPD1TV4-Tyxx-IP-S	New Generation Stainless Steel DUAL PTZ IP camera station, 24VAC
TSPD2TV4-Tyxx-IP-S	New Generation Stainless Steel DUAL PTZ IP camera station, 120VAC
TSPD3TV4-Tyxx-IP-S	New Generation Stainless Steel DUAL PTZ IP camera station, 230VAC
TSPD1TV4-Tyxx-SM-S	New Generation Stainless Steel DUAL PTZ IP camera station, SM FO Media Converter, 24VAC
TSPD2TV4-Tyxx-SM-S	New Generation Stainless Steel DUAL PTZ IP camera station, SM FO Media Converter, 120VAC
TSPD3TV4-Tyxx-SM-S	New Generation Stainless Steel DUAL PTZ IP camera station, SM FO Media Converter, 230VAC

TTxx = camera with Analytics

TRxx = camera with Analytics and Radiometry

To order the required camera configuration, please replace "Tyxx" with the number indicated in the table below.

CAMERA MODEL SELECTION

	TTxx (Analytics only)		TRxx (Analytics & Radiometry)	
	9Hz	30Hz	9Hz	30Hz
7.5mm	TT21	TT31	-	-
9mm	TT22	TT32	TR22	TR32
13mm	TT23	TT33	TR23	TR33
19mm	TT24	TT34	-	-
25mm	TT25	TT35	TR25	TR35
35mm	TT26	TT36	TR26	TR36
60mm	TT28	TT38	-	-

PRE-ASSEMBLED CABLE TAILS

SAUCCT3-B	3 meters composite cable tail (power, CAT6A, data) with two M25 nickel-plated brass glands
SAUCCTF3-D	3 meters composite cable tail (power, data, fiber optic) with two M25 nickel-plated brass glands. Fiber termination: SC
SAUCCT5-B	5 meters composite cable tail (power, CAT6A, data) with two M25 nickel-plated brass glands
SAUCCTF5-D	5 meters composite cable tail (power, data, fiber optic) with two M25 nickel-plated brass glands. Fiber termination: SC
SAUCCT10-B	10 meters composite cable tail (power, CAT6A, data) with two M25 nickel-plated brass glands
SAUCCTF10-D	10 meters composite cable tail (power, data, fiber optic) with two M25 nickel-plated brass glands. Fiber termination: SC

ACCESSORIES

SSBK-L	Wall mounting bracket
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DIMENSIONS

