

# TECNOVIDEO

CCTV SYSTEMS AND ACCESSORIES

## INNO DUAL 4K VISIBLE & THERMAL PTZ CAMERA

INNOVATIVE STAINLESS STEEL 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: 336X256 OR 640X512 RESOLUTION, 9HZ OR 25HZ, LWIR
- DUAL INDEPENDENT VISIBLE AND THERMAL VIDEO STREAMS
- WIDE RANGE OF THERMAL LENSES
- EIS ELECTRONIC IMAGE STABILIZER (VISIBLE)
- INTEGRATED WINDOW WIPER (VISIBLE)
- VERY LOW POWER CONSUMPTION
- EASY MAINTENANCE
- IP66/67/68/69, NEMA 4X
- OPTIONAL BUILT-IN FIBER MEDIA CONVERTER
- OPTIONAL BUILT-IN 120VAC OR 230VAC POWER SUPPLY



## TECHNICAL SPECIFICATIONS

### GENERAL & MECHANICAL

<b>Dimensions</b>	See dimensions drawings
<b>Operating Temperature</b>	-60° +60°C, +75°C peak (-76°F +140°F, +167°F peak)
<b>Construction</b>	AISI316L Stainless Steel
<b>Finish</b>	Electro-polished
<b>Window</b>	Germanium HC coated 50mm (Thermal)
<b>Mounting</b>	4x Ø11 on 195 PCD
<b>Cable entries</b>	1x M25x1,5 (second cable entry available on demand)
<b>Wiper</b>	Yes (visible)
<b>Pan Angle</b>	360° (continuous rotation)
<b>Pan Speed</b>	0 – 40°/second
<b>Pan Torque</b>	20Nm (limited with safety device)
<b>Tilt Angle</b>	180° (+/-90°)
<b>Tilt Speed</b>	0 – 20°/second
<b>Tilt Torque</b>	20Nm (limited with safety device)
<b>Rotation angle</b>	Electronically adjustable limit switches
<b>Backlash</b>	<0,1°
<b>Max preset accuracy</b>	0,04°
<b>Control protocol</b>	Pelco D (RS485)
<b>Weight</b>	Unit: 40 Kg / Package: 45 Kg

### ELECTRICAL

<b>Temperature Climatization</b>	
- <b>Camera Housing</b>	T[°C] ON = 12 ± 4°C, T[°C] OFF = 20 ± 3°C
- <b>Gear motors</b>	Electronically controlled de-icing
<b>Available voltages</b>	24VAC, 120VAC, 230VAC (+/-10%) 24VDC available on request
<b>Power consumption</b>	10W min (stationary and de-icing/heater/ wiper/illuminator off), 170W MAX

### CERTIFICATIONS

<b>Ingress Protection</b>	EN 60529 (IP66/IP67/IP68/IP69), NEMA 4X
<b>Vibrations and Shock</b>	EN/IEC 60068-2-6; EN/IEC 60068-2-27; DNV-CG-0339
<b>EMC</b>	EN 55035; EN/IEC 61000-6-4; EN/IEC 61000-3-2; EN/IEC 61000-3-3; EN/IEC 61000-6-2; CISPR-32; CISPR-35; DNV-CG-0339
<b>LVD</b>	EN/IEC 62368-1
<b>FCC</b>	FCC part 15B
<b>RoHS</b>	2011/65/EU + 2015/863/EU (RoHS 3)
<b>WEEE</b>	2012/19/EU

### CAMERA (DAY/NIGHT)

<b>Sensor</b>	1/1.8" Sony Progressive CMOS, 8MP
<b>Resolution</b>	Up to 3864x2180 (4K)
<b>Compression</b>	H.265/H.264/MJPEG
<b>Streaming</b>	Up to 4 configurable streams
<b>Frame Rate</b>	60fps (WDR off), 30 fps (WDR on)
<b>Sensitivity</b>	Color: 0.04 lux, B/W: 0.002 lux
<b>Shutter Speed</b>	1 to 1/10000 s
<b>Optical Filter</b>	Automatically removable IR-cut filter
<b>White Balance</b>	Contrast White Balance
<b>Dynamic range</b>	WDR/HDR
<b>Lens</b>	22x Optical Zoom Auto Focus, 10x Digital, focal Length 6.4-138.5 mm
<b>Analytics</b>	Motion Detection/Tampering. OPTIONAL: intrusion detection, wrong direction, object removal, sabotage, loitering, stopped vehicle, object counting
<b>Image settings</b>	Color, Brightness, Sharpness, Contrast, White Balance, Exposure control, 2D/3D Noise Reduction
<b>Event Triggers</b>	External Input, Analytics, Network Failure Detection, Periodical Event, Manual Trigger
<b>Event Actions</b>	External Output Activation
<b>Edge Recording</b>	Micro SD/SDHC/SDXC (card not provided)

<b>Network Storage</b>	Support for recording to NAS
<b>SNR</b>	>50dB
<b>Noise Reduction</b>	3D Motion Compensated Noise Reduction
<b>Iris</b>	P-Iris, Auto-Iris
<b>Image Stabilization</b>	EIS

### CAMERA (THERMAL)

<b>Sensor</b>	VOx Microbolometer, 17µm, uncooled
<b>Resolution</b>	336x256 or 640x512 pixels
<b>Spectral Band</b>	LWIR 7.5-13.5µm
<b>Compression</b>	H.264 (Baseline Profile / Main Profile / High Profile), H.265, MJPEG
<b>Streaming</b>	Up to three streams
<b>Frame Rate</b>	9Hz (9fps) or 25Hz (25fps)
<b>Focus Settings</b>	Fixed manual focus, minimum focus distance, depending on models
<b>Sensitivity</b>	<50 mK @ f/1.0
<b>Shutter type</b>	SSN - Silent Shutterless NUC™ for continuous image uniformity improvement

### LENS (THERMAL)

	FOV (HxV)	FOV (HxV)
	336x256	640x512
7.5mm	45°x35°, F1.25	90°x69°, F1.4
9mm	35°x27°, F1.25	69°x56°, F1.4
13mm	25°x19°, F1.25	45°x37°, F1.25
19mm	17°x13°, F1.25	32°x26°, F1.25
25mm	13°x10°, F1.1	25°x20°, F1.1
35mm	9.3°x7.1°, F1.2	18°x14°, F1.2
50mm	6.5°x5.0°, F1.2	12.4°x9.9°, F1.2

<b>Analytics</b>	Basic video analytics: line crossing, intrusion detection, exception detection (optional)
<b>Edge Recording</b>	microSD, up to 128GB (card not provided)
<b>Gain</b>	DDE Digital Detail Enhancement™/ACE Active Contrast Enhancement™

### NETWORK

<b>Interface</b>	100BASE-TX/1000BASE-T or 100BASE-FX/1000BASE-X (fiber)
<b>Security</b>	User Authentication/HTTPS/IEEE 802.1x
<b>ONVIF</b>	ONVIF profile G/S compliant
<b>Protocols</b>	IPv4/v6, TCP, UDP, RTSP, HTTP, HTTPS, FTP, SMTP, DHCP, PPPoE, QoS, NTP

### FIBER MEDIA CONVERTER

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

### MODELS

<b>TSPD1TV4-TTxx-IP-S</b>	New Generation Stainless Steel DUAL PTZ IP camera station, 24VAC
<b>TSPD2TV4-TTxx-IP-S</b>	New Generation Stainless Steel DUAL PTZ IP camera station, 120VAC
<b>TSPD3TV4-TTxx-IP-S</b>	New Generation Stainless Steel DUAL PTZ IP camera station, 230VAC
<b>TSPD1TV4-TTxx-SM-S</b>	New Generation Stainless Steel DUAL PTZ IP camera station, SM FO Media Converter, 24VAC
<b>TSPD2TV4-TTxx-SM-S</b>	New Generation Stainless Steel DUAL PTZ IP camera station, SM FO Media Converter, 120VAC
<b>TSPD3TV4-TTxx-SM-S</b>	New Generation Stainless Steel DUAL PTZ IP camera station, SM FO Media Converter, 230VAC

To order the required camera configuration, please replace "TTxx" with the TT number indicated in the table on the right.

### CAMERA MODEL SELECTION TTXX

	336x256		640x512	
	9Hz	25Hz	9Hz	25Hz
7.5mm	TT01	TT11	TT21	TT31
9mm	TT02	TT12	TT22	TT32
13mm	TT03	TT13	TT23	TT33
19mm	TT04	TT14	TT24	TT34
25mm	TT05	TT15	TT25	TT35
35mm	TT06	TT16	TT26	TT36
50mm	TT07	TT17	TT27	TT37

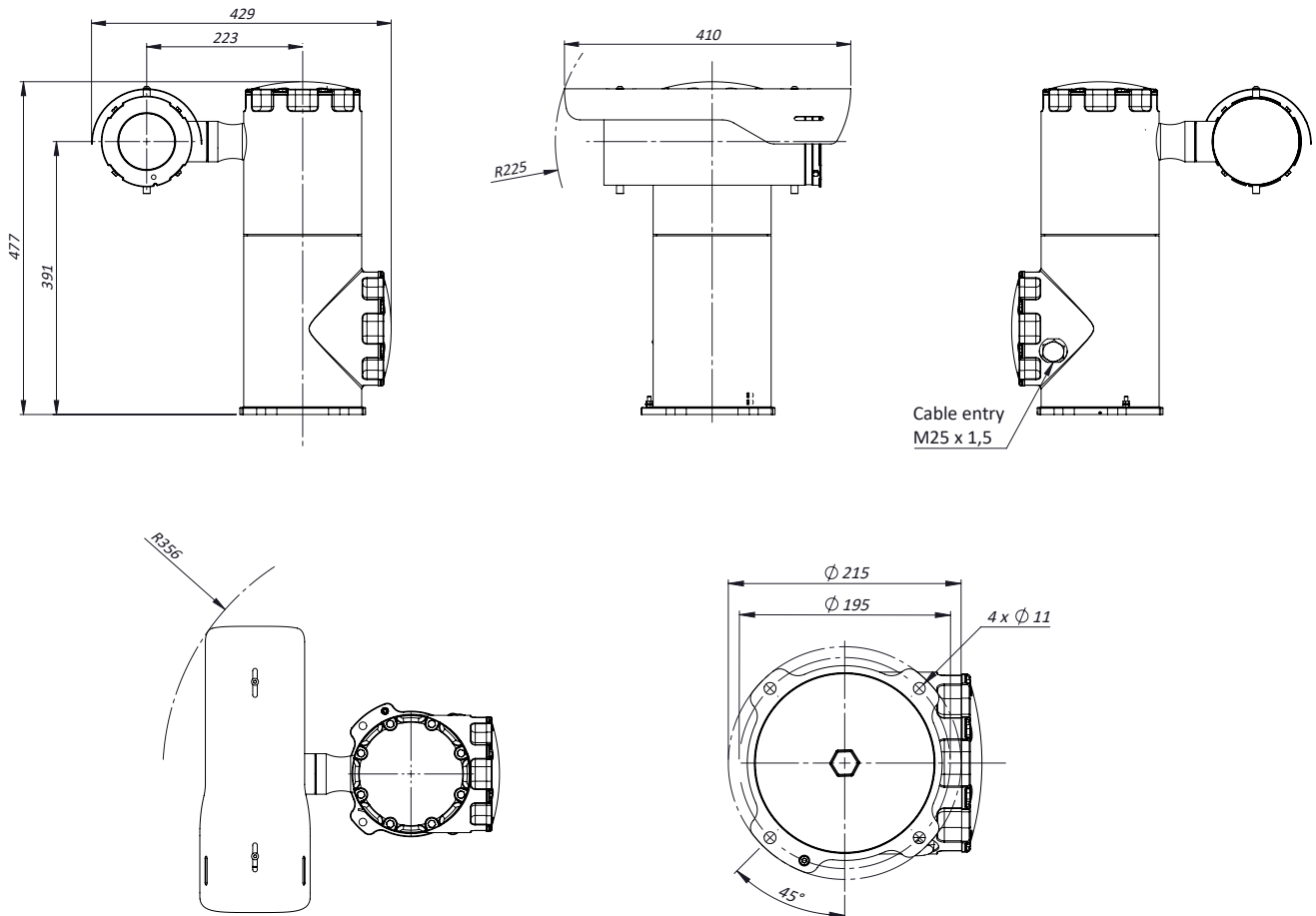
### PRE-ASSEMBLED CABLE TAILS

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

### ACCESSORIES

<b>SSBK-L</b>	Wall mounting bracket
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## DIMENSIONS



Dimensions in millimetres - Tolerances according QMS - Design and products specifications subject to change without notice - rev. 20231108