

## INNO THERMAL PTZ CAMERA

INNOVATIVE STAINLESS STEEL THERMAL PTZ CAMERA STATION

SAFE AREA

- **INNOVATIVE PRODUCT, BEST IN CLASS TECHNOLOGY**
- AISI316L STAINLESS STEEL CONSTRUCTION
- THERMAL: 336X256 OR 640X512 RESOLUTION, 9HZ OR 25HZ, LWIR
- WIDE RANGE OF THERMAL LENSES
- VERY LOW POWER CONSUMPTION
- EASY MAINTENANCE
- IP66/67/68/69, NEMA 4X
- OPTIONAL BUILT-IN FIBER MEDIA CONVERTER
- OPTIONAL BUILT-IN IP OVER COAXIAL 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>	No
<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: 29 kg / Package: 34Kg

#### ELECTRICAL

<b>Temperature Climatization</b>	
- Camera Housing	T[°C] ON = 12 ± 4°C, T[°C] OFF = 20 ± 3°C
- Gear motors	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 off), 130W 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 (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

**INNOVATIVE STAINLESS STEEL PTZ THERMAL CAMERA STATION**

<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
<b>ONVIF</b>	ONVIF
<b>Protocols</b>	TCP / IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP

**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

**FIBER MEDIA CONVERTER**

<b>Interface</b>	10/100 Base-TX over Coaxial Cable
<b>Bandwidth</b>	Up to 95Mbps downlink/uplink
<b>Maximum Distance</b>	1800m
<b>Technology</b>	Broadband over Power Lines (BPL)
<b>Interference Prevention</b>	IEEE 1901-2010 Inter-System Protocol ISP

**MODELS**

<b>TSP1TTxx-IP-S</b>	New Generation Stainless Steel Thermal PTZ camera station, 24VAC
<b>TSP2TTxx-IP-S</b>	New Generation Stainless Steel Thermal PTZ camera station, 120VAC
<b>TSP3TTxx-IP-S</b>	New Generation Stainless Steel Thermal PTZ camera station, 230VAC
<b>TSP1TTxx-SM-S</b>	New Generation Stainless Steel Thermal PTZ camera station, SM FO Media Converter, 24VAC
<b>TSP2TTxx-SM-S</b>	New Generation Stainless Steel Thermal PTZ camera station, SM FO Media Converter, 120VAC
<b>TSP3TTxx-SM-S</b>	New Generation Stainless Steel Thermal PTZ camera station, SM FO Media Converter, 230VAC

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

**CAMERA MODEL SELECTION TTX**

	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

