SightSensor TC

Long-Range Thermal & Visible Smart Camera



Outstanding Thermal and HD Color Detection

SightSensor TC is a dual-imager smart camera that detects intruders with high accuracy and low nuisance alerts at perimeters and critical outdoor sites. Building on SightLogix's heritage for outstanding detection and high-clarity thermal video, SightSensor TC combines a thermal sensor, color sensor, geo-aware video analytics, thermal Al nuisance alarm filtering, onboard video storage, automatic stabilization, and a toolbox of filters to optimize performance.



FEATURES

- ▼ Thermal and visible color sensors in one device
- Geospatial Video Analytics
- Outstanding thermal image quality

BENEFITS

- Detects & validates thermal & visible alarms in real-time
- Higher detection accuracy and lower false alarms
- Nighttime thermal surveillance without lighting

THERMAL DETECTION



Detection zones optionally displayed for easier setup

HD COLOR DETAIL



Thin white lines indicate thermal detection zone

ORDERING INFORMATION (384x288)

Part Number	Thermal Array	Thermal FOV	Thermal Lens	Visible FOV	Inbound Detection
TC480-220	348x288	80°	4.9mm	91°	164 ft (50m)
TC440-220	348x288	40°	9.1mm	51°	360 ft (110m)
TC428-220	348x288	28°	13mm	40°	525 ft (160m)

Detection distance will be further if person is moving across the $\ensuremath{\mathsf{FOV}}$

ORDERING INFORMATION (640 x 480)

Part Number	Thermal Array	Thermal FOV	Thermal Lens	Visible FOV	Inbound Detection		
TC75-622	640x480	90°	7.5mm	110°	246 ft (75m)		
TC100-622	640x480	70°	9mm	78°	328 ft (100m)		
TC145-622	640x480	50°	13mm	65.5°	467 ft (145m)		
TC195-622	640x480	37.5°	16.7mm	51.3°	640 ft (195m)		
TC220-622	640x480	32°	19mm	40°	722 ft (220m)		
Detection distance will be further if person is moving across the FOV							

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Specifications



Thermal Imager

Thermal Detector

Un-cooled VOx Microbolometer 8-14 µm

Resolution

TC4: 348x288 or TC6: 640x480

Dynamic Range

14 bit digital sensor interface

Aspect Ratio: 4:3

Sensitivity (NETD) f/1.0: < 50 mK at room temp

Frame Rate (FPS):

384x288: Up to 30; 640x480: Up to 25 fps

Video Output: H.264, MIPEG



Video Analytics

Video Analytic Rules (Up to 64 individual Alarm Zones)

Motion Tracking, From/To Zones, Target Size Filtering, Wrong-Way Direction. Loitering, Object Left Behind, Speed, Time of Day, Mask Zones, Shock Detection, Privacy Zones

Thermal AI Filter Options: "None", "Everything Except Person and Vehicle," "Everything Except Person," Everything Except Vehicle".

Onboard Storage - Built-in microSD slot (card not supplied; high-endurance cards strongly recommended). Stored clips accessed via WebConfig.

Communications

Metadata via industry standard XML over a HTTP/HTTPS interface for 3rd-party integration



Power Requirements (24VAC only)

TC4 384x288: 31W (1.5 amps) TC6 640x480: 35W (1.5 amps)

I/O Connectors

RJ45 (Ethernet), terminal blocks for RS422/RS232, power, relay out

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Relay Out: Max current: 0.3A, Max voltage 24VDC

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HD Color Imager

Imager: 2 MP (1/2.8-inch, Progressive Scan CMOS)
Aspect Ratio: 16:9 (Full HD 1080p, 1920 x 1080)
Dynamic Range: WDR >120db Multiple exposure
Imaging Area: Diagonal 6.46 mm (Type 1 / 2.8)

Minimum Illumination: 0.01 Lux @ F1.2

Frame Rate: Up to 15 FPS Lens: f1.6 - f2.0, fixed focus

Day/Night: Controllable IR cut filter **Video Output**: H.264, MJPEG



Network

Ethernet Wired

100 RJ45, IEEE 802.3, 802.3i, 802.3u

Data Rate: 64 Kbps to 8 Mbps

Operating Mode

100 Mbps - Full-duplex, Half-duplex

Protocols

DHCP, IPv4, HTTP, HTTPS, SSL, SLP, DNS, NTP, RTSP, RTP, TCP, LIDP, IGMP, RTCP, ICMP, ARP

TCP, UDP, IGMP, RTCP, ICMP, ARP

Configuration: SightMonitor application or browser-based WebConfig



Weight: 2.1 kg (4.6 lbs.)

Mounting 3 x 1/4-20 UNC bolts

Dimensions 30.7 cm L x 14.7 cm W x 14.0 cm

Powder Coat Rating 1000 sea-spray hours

Enclosure: IP66

Environmental

Operating Temperature

384: -40° to +55°C (-40° to +131°F) 640: -40° to +60°C (-40° to +140°F)

Safety Compliance FCC Part 15, Class A, CE

Operating Relative Humidity

0 to 100%

Storage Temperature

-40° to +80°C (-40° to 176°F)

Storage Relative Humidity

0-95%, non-condensing

