SN-TPC4203KT-F

Thermal Imaging Bullet Network Camera

Key Features

- VOx uncooled focal plane detector with 400×300 resolution

- NETD ≤ 40mK

- 8/15/25/35/50mm fixed thermal lens

- Support human/vehicle detection

- Smart events: intrusion, single line crossing, double line crossing, loitering, wrong-way, people counting, enter area, leave area

- Support 3 temperature measurement rule types (spot, line, area)

- Temperature measurement range: -20°C to 150°C (-4°F to 302°F)

- Support 12VDC/24VAC/PoE power supply
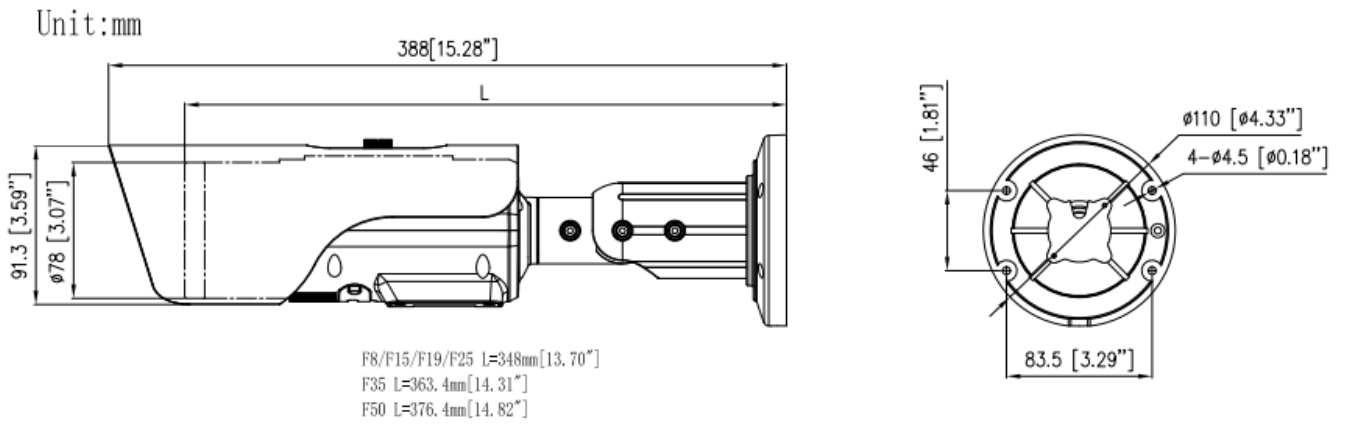
- NDAA Compliance, IP66

Specification

Thermal Camera

Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	Sensor is 400×300. Image can be scaled up to 704×576
Pixel Pitch	17μm
NETD	≤ 40mK
Spectral Range	8 to 14μm
Image Setting	Brightness, Sharpness, Contrast, Mirror, FFC control, 2D/3D DNR
Pseudo-color Setting	White-hot/Black-hot/Rainbow/Ironbow etc. up to 17 modes

Thermal Lens

Focus Control	Fixed lens, Manual focus				
Focal Length	8mm	15mm	25mm	35mm	50mm
Aperture	F1.0	F1.0	F1.0	F1.0	F1.0
Angle of View	H: 46°, V: 35.3°	H: 25.5°, V: 19.2°	H: 15.4°, V: 11.6°	H: 11°, V: 9°	H: 7.7°, V: 5.8°
Detection Distance (Humans: 1.8×0.5m)	235 m (771.7 ft)	441 m (1,446.9 ft)	734 m (2,408.1 ft)	1,028 m (3,373 ft)	1,469m (4,8120 ft)
Detection Distance (Vehicles: 4×1.4m)	722 m (2,368.8 ft)	1,353 m (4,439 ft)	2,255 m (7,398 ft)	3,157m (10,358 ft)	4,510m (14,797 ft)
Recognition Distance (Humans: 1.8×0.5m)	59 m (193.6 ft)	110 m (360.9 ft)	184 m (603.7 ft)	257 m (843.2 ft)	367 m (1,204.1 ft)
Recognition Distance (Vehicles: 4×1.4m)	180 m (590.6 ft)	338 m (1108.9 ft)	564 m (1850.4 ft)	789 m (2,588.6 ft)	1,127 m (3698 ft)
Identification Distance (Humans: 1.8×0.5m)	29 m (95.1 ft)	55 m (180.4 ft)	92 m (301.8 ft)	129 m (423.2 ft)	184 m (603.7 ft)
Identification Range (Vehicles: 4×1.4m)	90 m (295.3 ft)	169 m (554.5 ft)	282 m (925.2 ft)	395 m (1,295.9 ft)	564 m (1850.4 ft)

* The table is only for reference and the performance may vary according to different environment.

* The optimal detection, recognition, and identification distances are calculated according to Johnson's Criteria.

Detection Range: In order to distinguish an object from the background, the object must be covered by 1.5 or more pixels.

Recognition Range: In order to classify the object (animal, human, vehicle, etc.), the object must be covered by 6 or more pixels.

Identification Range: In order to identify the object and describe it in details, the object must be covered by 12 or more pixels.

Detection Range Table

Temperature Measurement (Object: 1 × 1m)	94 m (308.4 ft)	176 m (577.4 ft)	294 m (964.6 ft)	412 m (1,351.7 ft)	588 m (1,929.1 ft)
Temperature Measurement (Object: 0.2 × 0.2m)	19 m (62.3 ft)	35 m (114.8 ft)	59 m (193.6 ft)	82 m (269 ft)	118 m (387.1 ft)
Fire Detection (Object: 1 × 1m)	235 m (771 ft)	441 m (1,446.8 ft)	735 m (2,411.4 ft)	1,029 m (3,376 ft)	1,471 m (4,826 ft)
Fire Detection (Object: 0.2 × 0.2m)	47 m (154.2 ft)	88 m (288.7 ft)	147 m (482.3 ft)	206 m (675.9 ft)	294 m (964.6 ft)

Note: The table is for reference only. The distances within it are subject to actual conditions including atmospheric conditions, target size, the installation site, and more.

Video and Audio	
Main Stream	704×576 @25/30fps
Sub Stream	CIF @25/30fps
Bit Rate Control	CBR/VBR
Bit Rate	Main stream: 100Kbps to 6Mbps, Sub stream: 10Kbps to 1.5Mbps
Region of Interest	Off/On (8 Zone, Rectangle)
Smart Encode	Support
Audio Compression	G711: 64kbps, RAW_PCM: 128kbps
Smart Function	
Smart Alarm	Motion detection, Disk alarm, I/O alarm, IVS alarm, Temperature detection alarm
Smart Detection	Support human/vehicle detection
Intelligent Analysis	Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way, Enter area, Leave area (these functions support accurate detection of human/vehicles), People counting
Temperature Detection	
Temperature Detection	3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line).
Temperature Alarm	Over temperature alarm, Temperature difference alarm
Accuracy	±2℃ / ±2%
Response Time	≤ 30ms
Temperature Range	-20°C to 150°C (-4°F to 302°F)
Network	
Protocols	IPv4/IPv6, HTTP, HTTPS, RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, DDNS, PPPOE, FT, SMTP, 802.1x, SNMP
Interoperability	ONVIF, CGI, SDK
Max. User Access	10 Users
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge
Web Language	English, Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian
Interface	
Network Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector
Audio Interface	1ch Audio In, 1ch Audio Out
Alarm Interface	2ch Alarm In, 2ch Alarm Out
RS-485	Support
Reset Button	Support

SD Card Slot	Built-in, up to 128GB

General	
Power Supply	12VDC/24VAC/PoE
Power Consumption	Max 5W
Working Temperature	-40°C to 60°C (-40°F to 140°F)
Storage Conditions	0 to 90% RH
Certifications	CE /FCC
Ingress Protection	IP66
Casing	Metal
Dimensions	φ110 × 388 mm (φ4.33 × 15.28 inch)
Net Weight	1.8 kg (3.97 lb) with 15mm lens

Ordering Information	
Model	Description
SN-TPC4203KT-F08	Focal Length: 8mm
SN-TPC4203KT-F15	Focal Length: 15mm
SN-TPC4203KT-F25	Focal Length: 25mm
SN-TPC4203KT-F35	Focal Length: 35mm
SN-TPC4203KT-F50	Focal Length: 50mm

Dimensions (mm)

Unit:mm

388[15.28"]

L

91.3 [3.59"]
Ø78 [3.07"]

F8/F15/F19/F25 L=348mm[13.70"]
F35 L=363.4mm[14.31"]
F50 L=376.4mm[14.82"]

46 [1.81"]
Ø110 [Ø4.33"]
4-Ø4.5 [Ø0.18"]
83.5 [3.29"]

Accessories

Optional:

SN-CBK645G
Junction Box

SN-CBK649B
Junction Box

SN-CBK101A
Pole Mount

SN-CBK102A
Corner Mount