SNTPC2553DRTF

Bi-spectrum Bullet Network Camera

Key Features

- 256 × 192 resolution, 12 µm, VOx UFPA, NETD ≤ 50 mK
- Lens Options: Thermal – 3.5mm/7mm/10mm fixed; Visible – 4mm/8mm fixed
- Detection Capabilities: Human/vehicle, smoker, smoke & flame, fire point detection
- Intelligent Analytics: Intrusion, single/double line crossing, loitering, wrong-way, people counting, enter/leave area detection, smart motion detection
- Support 3 temperature measurement rule types (spot, line, area)
- Temperature Monitoring & Alarm: -20°C to 150°C (-4°F to 302°F), Accuracy: ±2°C / ±2%
- Built-in speaker and strobe light; supports sound-light alarm
- Smart IR range up to 35m/50m
- Support I/O alarm, RS485, built-in SD card slot
- Power Supply: DC12V/DC24V, PoE

Specification

Camera	Thermal	Visible
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays	1/2.7" CMOS
Resolution	256(H) × 192(V) , Image can be scaled up to 704 × 576	2880(H) × 1620(V)
Pixel Pitch	12μm	
Spectral Range	8 to 14μm	
NETD	≤ 50mK	
Min. Illumination		Color: 0.05Lux @(F1.6, AGC ON), B/W: 0.005Lux @(F1.6, AGC ON), 0Lux with IR
Shutter Speed		1/5 to 1/20,000s
Lens Type	Fixed	Fixed
Focal Length	3.5 mm, 7mm, 10mm optional	4 mm, 8 mm optional
Max. Aperture	F1.0	F1.6/F2.0
Focus Control	Fixed focal	Fixed focal
Field of View (FOV)	3.5 mm: H: 48°, V: 36° 7 mm: H: 24°, V: 18° 10 mm: H: 17°, V: 13°	4 mm: H: 92°, V: 46° 8 mm: H: 40°, V: 20°
IVS		
AI Multi-Target	Human and vehicle detection	Human and vehicle detection
Intelligent Analysis	Intrusion, Single Line Crossing, Double Line Crossing, Loitering, Wrong-Way Detection, Enter Area, Leave Area, Smart Motion Detection Support alarm triggering by specified target types (human and vehicle)	Intrusion, Single Line Crossing, Double Line Crossing, Loitering, Wrong-Way Detection, Enter Area, Leave Area, Smart Motion Detection Support alarm triggering by specified target types (human and vehicle)
Smoker Detection	Support	
Smoke and Flame Detection		Support
Fire Spot Detection	Support	
People Counting	Support	Support
Video and Audio		
Main Stream	D1 (704×576) @25/30fps	2880×1620, 2560×1440, 2304×1296, 1920×1080, 1280×720 @25fps
Sub Stream	D1, CIF, 256×192 @25/30fps	D1, VGA @25fps
Bit Rate Control	CBR/VBR	CBR/VBR
Bit Rate	Main Stream: 100Kbps to 3Mbps, Sub Stream: 10Kbps to 3Mbps	Main Stream: 100Kbps to 12Mbps Sub Stream: 10Kbps to 6Mbps
Smart Encode	Support	Support
Audio Compression	G.711 A-law, G.711 μ-law, RAM PCM	G.711 A-law, G.711 μ-law, RAM PCM
Image		
Image Setting	Brightness, Contrast, Sharpness	Brightness, Saturation, Contrast, Sharpness
Mirror	Horizontal / Vertical / Horizontal+Vertical	Horizontal / Vertical / Horizontal+Vertical
Pseudo-color Setting	Up to 17 colors (White-hot / Black-hot / Rainbow / Iron red / HSV /Bone / Cool / Copper / Fire-hot / Pink / Spring / Summer / Autumn / Winter / Jet /	

	Flame / Rose -Bengal)	
FFC Control	Auto / Manual	
Gain Control		Auto / Manual
White Balance		Auto / Tungsten / Fluorescent / Daylight / Shadow
Day/Night		Day mode / Night mode / Time
Noise Reduction	2D/3D DNR	2D/3D DNR
Image Enhancement		WDR, HLC, BLC
Wide Dynamic Range		True WDR 120dB
OSD	Up to 8 OSD	Up to 8 OSD
Privacy Masking	Up to 4 areas	Up to 4 areas
Illuminator		IR Range: -4 mm: Up to 35m (114.83 ft.) -8 mm: Up to 50m (164.04 ft.)
Thermal Function		
Temperature Range	-20°C to 150°C (-4°F to 302°F)	
Accuracy	±2°C / ±2%	
Temperature Detection	3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line).	
Temperature Display	Display in the lower left corner; follow the cursor display of the highest temperature, lowest temperature or average temperature	
Image Fusion	Fusion view of thermal view and overlaid details of the optical channel	
Event		
Alarm Triggers	IVS, Temperature anomaly, Motion detection, Alarm Input, Disk alarm, Network alarm, Abnormal sound detection	
Alarm Events	Alarm out, Audio alarm, Flashing light alarm, Alarm record, SMTP, FTP upload	
Network		
Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPOE, RTSP/RTP/RTCP, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, 802.1x, SNMP, Multicast	
Compatible Integration	ONVIF (Profile S/T/G/M), CGI, SDK	
User/Host Level	Up to 10 users, 3 levels: Administrator, Operator, Media user	
Security	IP address filter, encrypted HTTPS, Illegal login lock, IEEE 802.1x	
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge	
Interface		
Network Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector	
Audio Interface	1ch input, 1ch output	
Built-in Speaker	Support	
Alarm Interface	2ch input, 2ch output	
RS-485	1	
SD Card Slot	Support Micro SD card, up to 512GB	
Reset Button	Support	
General		

Web Language	English, Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian. Default: English
Power Supply	12 VDC/24 VDC/PoE (802.3af)
Power Consumption	Max 12W
Working Temperature and Humidity	-40°C to 60°C (-40°F to 140°F) Less than 90% RH
Certifications	CE-EMC (EN 55032:2015+A1:2020, EN 55035:2017+A11:2020, EN 50130-4:2011+A1:2014, EN 61000-6-3:2007+A1:2011+AC:2012, EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1:2019)) FCC (FCC 47 CFR 15, Subpart B, ANSI C63.4-2014)
Ingress Protection	IP66
Material	Metal
Dimensions	303 × 95 × 107mm (11.93 × 3.74× 4.21 inch)
Net Weight	1.35 Kg (2.98 lb)

Ordering Information	
Model	Description
SN-TPC2553DRT-F3.5	Thermal Focal Length: 3.5 mm, Optical Focal Length: 4 mm
SN-TPC2553DRT-F7	Thermal Focal Length: 7 mm, Optical Focal Length: 8 mm
SN-TPC2553DRT-F10	Thermal Focal Length: 10 mm, Optical Focal Length: 8 mm

Thermal DRI Range Table

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

Note: 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.

DORI Distance			
Lens	**3.5 mm**	**7 mm**	**10 mm**
Detection Distance (Humans: 1.8 × 0.5 m)	146 m (479.0 ft)	292 m (958.0 ft)	417 m (1,368.1 ft)
Detection Distance (Vehicles: 1.5 × 4 m)	447 m (1,466.5 ft)	894 m (2933.1 ft)	1,278 m (4,192.9 ft)
Recognition Distance (Human: 1.8 × 0.5 m)	36 m (118.1 ft)	73 m (239.5 ft)	104 m (341.2 ft)
Recognition Distance (Vehicles: 1.5 × 4 m)	112 m (367.5 ft)	224 m (734.9 ft)	319 m (1,046.5 ft)
Identification Distance (Human: 1.8×0.5 m)	18 m (59 ft)	36 m (118.1 ft)	52 m (170.6 ft)
Identification Distance (Vehicles: 1.5 × 4 m)	56 m (183.7 ft)	112 m (367.5 ft)	160 m (524.9 ft)

Thermal Smart Detection Range Table

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.

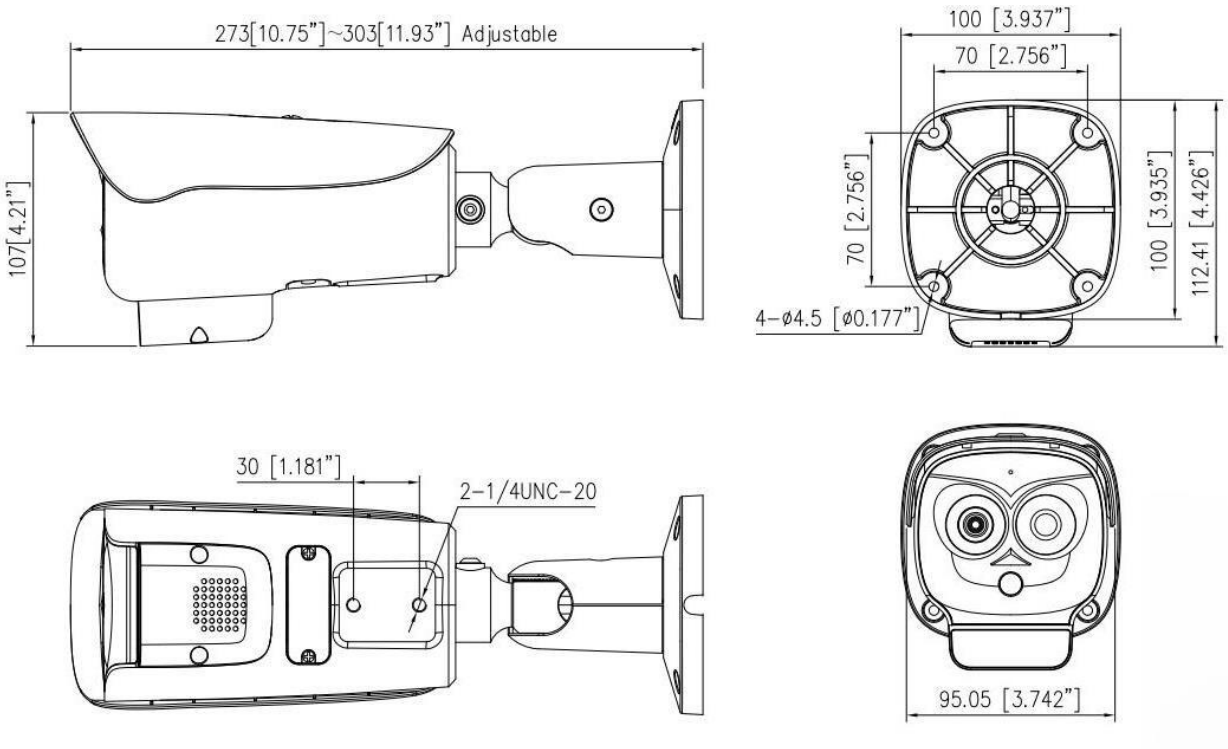
Detection Range Table			
Lens	**3.5 mm**	**7 mm**	**10 mm**
VCA Detection Distance (Human: 1.8 × 0.5 m)	30 m (98.4 ft)	60 m (196.9 ft)	103 m (337.9 ft)
VCA Detection Distance (Front/Rear of Vehicle: 1.5 × 4 m)	35 m (114.8 ft)	70 m (229.7 ft)	230 m (754.6 ft)
Temperature Measurement (Object: 1 × 1 m)	58.3 m (191.3 ft)	116.7 m (382.9 ft)	166.7 m (546.9 ft)
Temperature Measurement (Object: 0.2 × 0.2 m)	11.7 m (38.4 ft)	23.3 m (76.4 ft)	33.3 m (109.3 ft)
Fire Detection (Object: 0.2 × 0.2 m)	29.2 m (95.8 ft)	58.3 m (191.3 ft)	83.3 m (273.3 ft)
Smoking Detection	13 m (42.7 ft)	25 m (82 ft)	40 m (131.2 ft)

Optical DORI Range Table

Note: DORI (Detect, Observe, Recognize, and Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.

DORI Distance		
Lens	**4 mm**	**8 mm**
Detect	85.4 m (280.18 ft)	150.4 m (493.44 ft)
Observe	34.2 m (112.20 ft)	60.2 m (197.51 ft)
Recognize	17.1 m (56.10 ft)	30.1 m (98.75 ft)
Identify	8.5 m(27.89 ft)	15.0 m (49.21 ft)

Dimensions (mm)



Accessories

Optional：

SN-CBK645G
Junction Box

SN-CBK101A
Pole Mount

SN-CBK102A
Corner Mount

SN-CBK627D
Pole Mount