

SN-TPC4107KV-F

Thermal Imaging Security Network Bullet Camera



Key Features

- VOx uncooled focal plane detector with 384×288 resolution
- NETD ≤ 40mK
- 9/15/25/35/50mm fixed thermal lens
- Support human/vehicle detection
- Support fire point detection and smoking 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 Module						
Image Sensor	Vanadium Oxide U	Vanadium Oxide Uncooled Focal Plane Arrays				
Resolution	Sensor is 384×288.	Sensor is 384×288. Image can be scaled up to 1280×720				
Pixel Pitch	17μm	17μm				
NETD	≤ 40mK	≤ 40mK				
Spectral Range	8 to 14μm	8 to 14μm				
Image Setting	Brightness, Sharpn	Brightness, Sharpness, Contrast, Mirror, FFC control, 2D/3D DNR, Defog				
Pseudo-color Setting	White-hot/Black-ho	White-hot/Black-hot/Rainbow/Ironbow etc. up to 17 modes				
Thermal Lens						
Focus Control	Fixed lens, Free foo	Fixed lens, Free focus				
Focal Length	9mm	15mm	25mm	35mm	50mm	
Aperture	F1.0	F1.0	F1.0	F1.0	F1.0	
Angle of View	H: 37°, V: 28°	H: 28°, V: 21°	H: 14°, V: 11°	H: 10°, V: 8°	H: 7.4°, V: 5.6°	
Detection Distance (Humans: 1.8×0.5m)	264m (866.1ft)	441m (1,446.9ft)	734m (2,408.1ft)	1,028m (3,372.7ft)	1,469m (4,819.6ft)	
Detection Distance (Vehicles: 4×1.4m)	812 m (2,664ft)	1,353m (4,439ft)	2,255m (7,398.3ft)	3,157m (10,357.6ft)	4,510m (14,796.6ft)	
Recognition Distance (Humans: 1.8×0.5m)	66m (216.5ft)	110m (360.9ft)	184m (603.7ft)	257m (843.2ft)	367m (1,204.1ft)	
Recognition Distance (Vehicles: 4×1.4m)	203m (666ft)	338m (1,109ft)	564m (1,850.4ft)	789m (2,588.6ft)	1,127m (3,697.5ft)	
Identification Distance (Humans: 1.8×0.5m)	33m (108.3ft)	55m (180.4ft)	92m (301.8ft)	129m (423.2ft)	184m (603.7ft)	
Identification Range (Vehicles: 4×1.4m)	101m (331.4ft)	169m (554.5ft)	282m (925.2ft)	395m (1,296ft)	564m (1,850.4ft)	

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

installation site, and more.

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)	106m (347.8ft)	177m (580.7ft)	294m (964.6ft)	412m (1,351.7ft)	588m (1,929.1ft)
Temperature Measurement (Object: 0.2 × 0.2m)	21.2m (69.6ft)	35.3m (115.8ft)	59m (193.6ft)	82m (269ft)	118m (616.8ft)
Fire Detection (Object: 1 × 1m)	265m (869.4ft)	441m (1,446.9ft)	735m (2,411.4ft)	1,029m (3,376ft)	1,471m (4,826.1ft)
Fire Detection (Object: 0.2 × 0.2m)	53m (173.9ft)	88m (288.7ft)	147m (482.3ft)	206m (675.9ft)	294m (964.6ft)

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

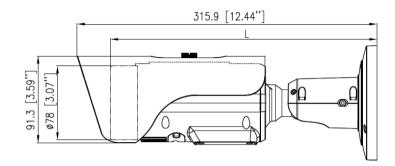
^{*} The optimal detection, recognition, and identification distances are calculated according to Johnson's Criteria.

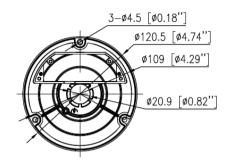
Video and Audio		
Main Stream	1280×720, 704×576, 384×288 @25fps	
Sub Stream	704×576, 384×288, 352×240 @25fps	
Bit Rate Control	CBR/VBR	
Bit Rate	Main stream: 100Kbps to 8Mbps, Sub stream: 100Kbps to 6Mbps	
Region of Interest	Off/On (8 Zone, Rectangle)	
Audio Compression	G711: 64kbps, RAW_PCM: 128kbps	
Smart Function		
Smart Alarm	Motion detection, Disk alarm, I/O alarm, IVS alarm, Temperature detection alarm	
Smart Detection	Support human/vehicle detection, fire point detection and smoking 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	±8°C	
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,="" edge<="" firefox,="" microsoft="" td=""></ie11,>	
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	
CVBS Interface	Support	
Control Interface	1ch RS-485	
Reset Button	Support	

SD Card Slot	Built-in, up to 256GB			
General				
Power Supply	12VDC/24VAC/PoE			
Power Consumption	Max 4.5W			
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	φ120.5 × 315.9 ~ 352.6 mm (φ4.74" × 12.44" ~ 13.88")			
Net Weight	1.62 kg (3.57 lb) with 9mm lens			
Ordering Information				
Model	Description			
SN-TPC4107KV-F09	Focal Length: 9mm			
SN-TPC4107KV-F15	Focal Length: 15mm			
SN-TPC4107KV-F25	Focal Length: 25mm			
SN-TPC4107KV-F35	Focal Length: 35mm			
SN-TPC4107KV-F50	Focal Length: 50mm			

Dimensions (mm)

With 9/15mm Lens





Accessories

Optional:







SN-CBK101A Pole Mount



SN-CBK102A Corner Mount