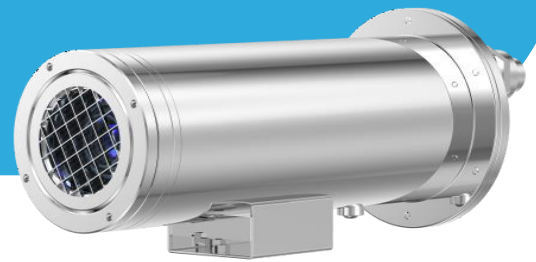


SNTPH4203DAF

Explosion-proof Bullet Thermal Camera



Key Features

- VOx uncooled focal plane detector with 400×300 resolution
- NETD ≤ 40mK
- 8/15/25/35/50mm fixed thermal lens optional
- Support human/vehicle detection, and fire point detection.
- Intelligent Analytics: intrusion, single line crossing, double line crossing, loitering, wrong-way detection, enter area, leave area, and people counting.
- Support temperature monitoring and exception alarm
- Support 3 temperature measurement rule types (spot, line, area)
- Temperature range: -20°C to 150°C (-4°F to 302°F), Accuracy: ±2°C / ±2%
- Material: 316L Stainless steel
- NDAA Compliance, IP68



Specification

| Thermal Module | |
|-----------------------|--|
| Image Sensor | Vanadium Oxide Uncooled Focal Plane Arrays |
| Resolution | Sensor is 400×300. Image can be scaled up to 704×576 |
| Pixel Pitch | 17 μm |
| NETD | ≤ 40mK |
| Spectral Range | 8 to 14 μm |
| Focus Control | Fixed lens (Manual focus) |
| Focal Length | 8 mm, 15 mm, 25 mm, 35 mm, 50 mm |
| Aperture | F1.0 |
| Field of View (FOV) | 8 mm: H: 46°, V: 35.3° 15 mm: H: 25.5°, V: 19.2° 25 mm: H: 15.4°, V: 11.6° 35 mm: H: 11°, V: 9° 50 mm: H: 7.7°, V: 5.8° |
| Intelligent Analytics | |
| Smart Detection | Human and Vehicle detection, and Fire point detection |
| Intelligent Analysis | Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way detection, Enter area, Leave area (these functions support accurate detection of human/vehicles) |
| People counting | Support |
| 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 Alarm | Temperature difference alarm, Threshold alarm, Temperature rise alarm |
| Temperature Display | Display in the lower left corner; follow the cursor display of the highest temperature, lowest temperature or average temperature |
| Response Time | ≤ 30ms |
| Video and Audio | |
| Main Stream | 704×576 @25/30fps |
| Sub Stream | CIF @25/30fps |
| Bit Rate Control | CBR/VBR |
| Bit Rate | Main stream: 100 Kbps to 6 Mbps, Sub stream: 10 Kbps to 1.5 Mbps |
| Region of Interest | Off/On (8 Zone, Rectangle) |
| Audio Compression | G.711 A-law, G.711 μ-law, PCM |
| Audio Bit Rate | 64 Kbps (G.711), 128 Kbps (PCM) |
| Image | |
| Image Setting | Brightness, Contrast, Sharpness |
| Mirror | 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 |
| Noise Reduction | 2D/3D DNR |

| | |
|------------------------------|--|
| OSD | Up to 8 OSD |
| Privacy Masking | Up to 4 areas |
| Event | |
| Alarm Triggers | IVS, Temperature anomaly, Motion detection, Alarm Input, Disk alarm, Network alarm, Abnormal sound detection |
| Event Actions | Alarm record, Alarm output, FTP upload, SMTP upload, Audible alarm output |
| Network | |
| Protocols | IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPoE, RTSP/ RTCP/RTP, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, ICMP, IGMP, SMTP, 802.1x, SNMP, Multicast |
| Interoperability | ONVIF (Profile S/T/G/M), SDK, CGI |
| Max Concurrent Streams | 10 channels |
| User/Host Level | 32+ users, 3 levels: Administrator, Operator, Media user |
| Security | IP address filter, 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 Audio In, 1ch Audio Out |
| Alarm Interface | 2ch Alarm In, 1ch Alarm Out |
| RS-485 | 1ch |
| SD Card Slot | Built-in, up to 512 GB |
| Reset Button | Support |
| General | |
| Language | English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English |
| Power Supply | 100 to 240 VAC |
| Power Consumption | Max 25 W |
| Working Temperature/Humidity | -40°C to 60°C (-40°F to 140°F), Humidity: ≤90% RH (non-condensing) |
| Certifications | CE-EMC - EN 55032, EN IEC 61000-6-3, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4 FCC 47 CFR Part 15 Subpart B |
| Ingress Protection | IP68 |
| Material | SUS316L |
| Dimensions | 464 × 166 × 171mm (18.27 × 6.54 × 6.73 inch) |
| Net Weight | 10 kg |
| Ordering Information | |
| Model | Description |
| SN-TPH4203DA-F08 | Focal Length: 8mm |
| SN-TPH4203DA-F15 | Focal Length: 15mm |
| SN-TPH4203DA-F25 | Focal Length: 25mm |
| SN-TPH4203DA-F35 | Focal Length: 35mm |
| SN-TPH4203DA-F50 | Focal Length: 50mm |

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.

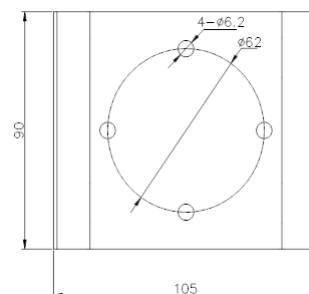
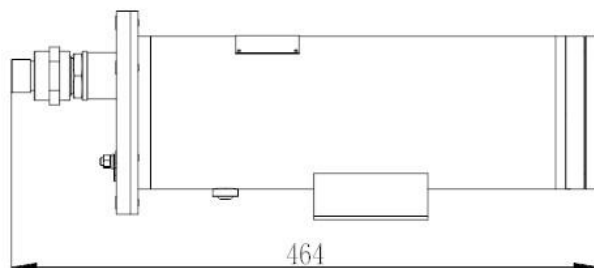
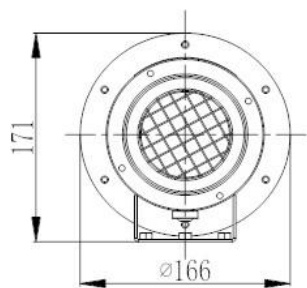
| DRI Distance Table | | | | | |
|--|--------------------|--------------------|----------------------|-----------------------|-----------------------|
| Focal Length | 8mm | 15mm | 25mm | 35mm | 50mm |
| Detection Distance (Humans: 1.8×0.5m) | 235 m (771.7 ft) | 441 m (1,446.9 ft) | 735 m (2,411.4 ft) | 1,029 m (3,376.0 ft) | 1,471 m (4,826.1 ft) |
| Detection Distance (Vehicles: 4×1.5m) | 722 m (2,368.8 ft) | 1,353 m (4,439 ft) | 2,255 m (7,398.3 ft) | 3,157 m (10,357.6 ft) | 4,510 m (14,796.6 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) | 368 m (1,207.4 ft) |
| Recognition Distance (Vehicles: 4×1.5m) | 180 m (590.6 ft) | 338 m (1,109 ft) | 564 m (1,850.4 ft) | 789 m (2,588.6 ft) | 1,127 m (3,697.5 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: 4×1.5m) | 90 m (295.3 ft) | 169 m (554.5 ft) | 282 m (925.2 ft) | 395 m (1,296 ft) | 564 m (1,850.4 ft) |

Thermal Smart Detection Distance 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 | | | | | |
|---|------------------|------------------|------------------|--------------------|--------------------|
| Focal Length | 8mm | 15mm | 25mm | 35mm | 50mm |
| VCA Detection Distance (Human: 1.8 × 0.5 m) | 50 m (164.0 ft) | 92 m (301.8 ft) | 105 m (344.5 ft) | 210 m (689.0 ft) | 284 m (931.8 ft) |
| VCA Detection Distance (Front/Rear of Vehicle: 4×1.5 m) | 100 m (328.1 ft) | 120 m (393.7 ft) | 200 m (656.2 ft) | 350 m (1,148.3 ft) | 450 m (1,476.4 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 (616.8 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) |

Dimensions (mm)



Accessories

Optional:



SN-BK401A-SS
Wall Mount



SN-BK406-SS
Pole Mount



SN-BK407-SS
Corner Mount



SN-BK400-SS(P/F/D)
Junction Box



Flexible Tube

