

Network Thermal

# TNM-C2722TDR

## Early Fire Detection Bi-spectrum Thermal Camera

## Key Features

- QVGA Thermal Resolution
- 3MP Visible Resolution
- -10°C~450°C Temperature Detection
- Early Fire Detection Flame, Temperature

• Bi-spectrum Multi-Channel: QQVGA Thermal & 3MP Visible Sensor
• Max. Framerate: Visiable 30fps, Thermal 8fps
• Angular Field of View : Thermal H: 57° / V: 44° / D: 71° &
Visible H: 69° / V: 50.8° / D: 88.9°
• Early fire detection (Analytics events based on AI engine)
,Temperature difference detection
• IP66/IP67, IK09 (except lenses in front)
• PoE: Max 10.8W, typical 6.2W

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com
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# TNM-C2722TDR

Early Fire Detection Bi-spectrum Thermal Camera



## Specifications

| 映像 | | Ch 1 | Ch 2 |
|---|---|---|---|
| Imaging Device | サイズ | 1/2.8" | |
| | タイプ | CMOS | Uncooled micro bolometer (160x120) |
| 解像度 | | 2048x1536, 1920x1080, 1280x960, 1280x720, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240 | 640x480, 320x240 |
| Max. Framerate | H.265/H.264 | 30fps/25fps(60Hz/50Hz) | 8fps |
| | MJPEG | 5fps | |
| Spectral Range | | | 8~14㎛ |
| NETD | | | ≤50mK |
| Pixel Size | | | 12㎛ |
| Min. Illumination (Lux) | Color(1/30sec, 30IRE) | 0.06 | |
| | BW(1/30sec, 30IRE) | 0.06 | |

| レンズ | | | |
|---|---|---|---|
| Focal Length (mm) | | 4.46 | 1.9 |
| Max Aperture Ratio (F number) | Wide | F1.65 | F1.1 |
| 視野角度 | Horizontal | 69 | 57 |
| | Vertical | 50.8 | 44 |
| | Diagonal | 88.9 | 71 |
| Min. Object Distance | | 1.9m(6.2ft) | 0.3m(0.98ft) |
| Focus Control | | Fixed | |

| Pan / Tilt / Rotate | | |
|---|---|---|
| Pan / Tilt / Rotate Range | Pan | 0°~360° |
| | Tilt | 0°~70° |
| | 回転 | 0°~360° |

| 技能 | | |
|---|---|---|
| Day & Night | Auto(Electrical) | |
| Backlight Compensation | BLC, WDR, SSDR | |

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## 技能

| | | | |
|---|---|---|---|
| Wide Dynamic Range (dB) | | 120 | |
| Digital Noise Reduction | | SSNR V | |
| モーション検知 | Quantity | 8ea | |
| | Shape | 8point Polygonal zones | |
| Privacy Masking | Quantity | 6ea | |
| | Shape | Rectangular zones | |
| | Color / Option | 灰色, 黒, 白 | |
| ゲイン制御 | | 低, 中, 高 | |
| ホワイトバランス | | ATW, AWC, 手動, 室内, 屋外 | |
| LDC | | サポート | |
| Electronic Shutter | モード | 最小, 最大, アンチフリッカー | |
| | Speed Range | 1/5~1/12,000sec | |
| ビデオ回転 | | FLIPモード, ミラー | |
| Alarm Interface | In/Out | Input 1ea, Output 1ea | |
| Alarm Triggers | | 分析, ネットワーク切断, アラーム入力, MQTT購読 | |
| Alarm Events When Alarm Trigger Occurred | | File upload(image): e-mail/FTP,<br>Notification: e-mail,<br>Recording: SD/SDHC/SDXC or NAS recording at event triggers,アラーム出力,<br>Handover: PTZ preset,send message by HTTP/HTTPS/TCP,Audio clip playback,<br>MQTT: publication,ライトアラーム | |
| オーディオ入力 | | Selectable(mic in/line in) | |
| オーディオ出力 | | Line out | |
| Color Pallettes | | | Whitehot, Sepia, Red, Custom |

## Radiometry

| | | | |
|---|---|---|---|
| Temperature Detect Range | | | Narrow: -10°C~140°C,<br>Wide: -10°C~450°C |
| Temperature Accuracy | | | Narrow: Greater of ±5°C or 5%,<br>Wide: Greater of ±10°C or 10% |
| Temperature Detection ROI Zones | Quantity | | 2ea |
| | Shape / Option | | 四角 |
| Spot Temperature Reading | | | サポート |
| ROI Condition Monitoring | | | 以上, 以下, 増加, 減少 |

## セキュリティ

| | |
|---|---|
| OS / Firmware Protect | Encrypted firmware, Secure boot, Signed firmware |
| ユーザー認証 | ダイジェスト認証, Prevent brute-force attack |
| Network authentication | IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2) |

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## セキュリティ

| | |
|---|---|
| Secure Communication | HTTPS, WSS(WebSocket Secure), SRTP |
| Access Control | IP-based access control |
| Data Protect | Encryption credentials |
| Audit | Access / System / Event Log management |
| デバイスID | Device certificate(Hanwha Vision Root CA) |
| Secure Storage | SDcard partition encrypt(AES-256) |

## 一般

| | | |
|---|---|---|
| メモリ | RAM | 2GB |
| | フラッシュ | 512MB |
| Edge Storage | Micro SD/SDHC/SDXC | Max. 512GB x 1slot |

## Environmental & Electrical

| | | |
|---|---|---|
| 動作条件 | 温度 | -30°C~+55°C(-22°F~+131°F) |
| | 湿度 | 0~95% RH(non-condensing) |
| | その他 | Start up should be done at above -10°C |
| 保管条件 | 温度 | -40°C~+60°C(-40°F~+140°F) |
| | 湿度 | 0~95% RH(non-condensing) |
| Input Voltage | | PoE(IEEE802.3af, Class3) |
| 消費電力 | PoE | Max 10.8W, typical 6.2W |

## Mechanical

| | |
|---|---|
| カラー | 白 |
| 材料 | アルミニウム |
| RAL Code | RAL9003 |
| Product Dimensions | Ø110x97mm(ø4.33x3.82") |
| Product Weight | 650g(1.43lb) |
| Compatible Gang Box | シングル |

## Certifications & Standards

| | |
|---|---|
| EMC | FCC 47 CFR 15 Subpart B Class A, ICES-3(A)/NMB-3(A), CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, VCCI CISPR 32 Class A, RCM AS-NZS CISPR 32 Class A, KS C 9832 Class A, KS C 9835 |
| Safety | UL 62368-1, CAN/CSA C22.2 NO. 62368-1, IEC 62471 |
| 環境 | IEC/EN 63000, IEC 60529 IP66, IEC 60529 IP67, IEC 62262 IK09 |

## DORI (EN62676-4 standard)

| | | | |
|---|---|---|---|
| Detect (25PPM/ 8PPF) | Wide | 70.9m(232.6ft) | |
| Observe (63PPM/ 19PPF) | Wide | 28.4m(93.1ft) | |
| Recognize (125PPM/ 38PPF) | Wide | 14.2m(46.5ft) | |

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## DORI (EN62676-4 standard)

| | | | |
|---|---|---|---|
| Identify (250PPM/76PPF) | Wide | 7.1m(23.2ft) | |

## Thermal Detection Range

| | | |
|---|---|---|
| 温度検知 | | 15m(49.21ft) |
| 火災早期検知 | | 15m(49.21ft) |

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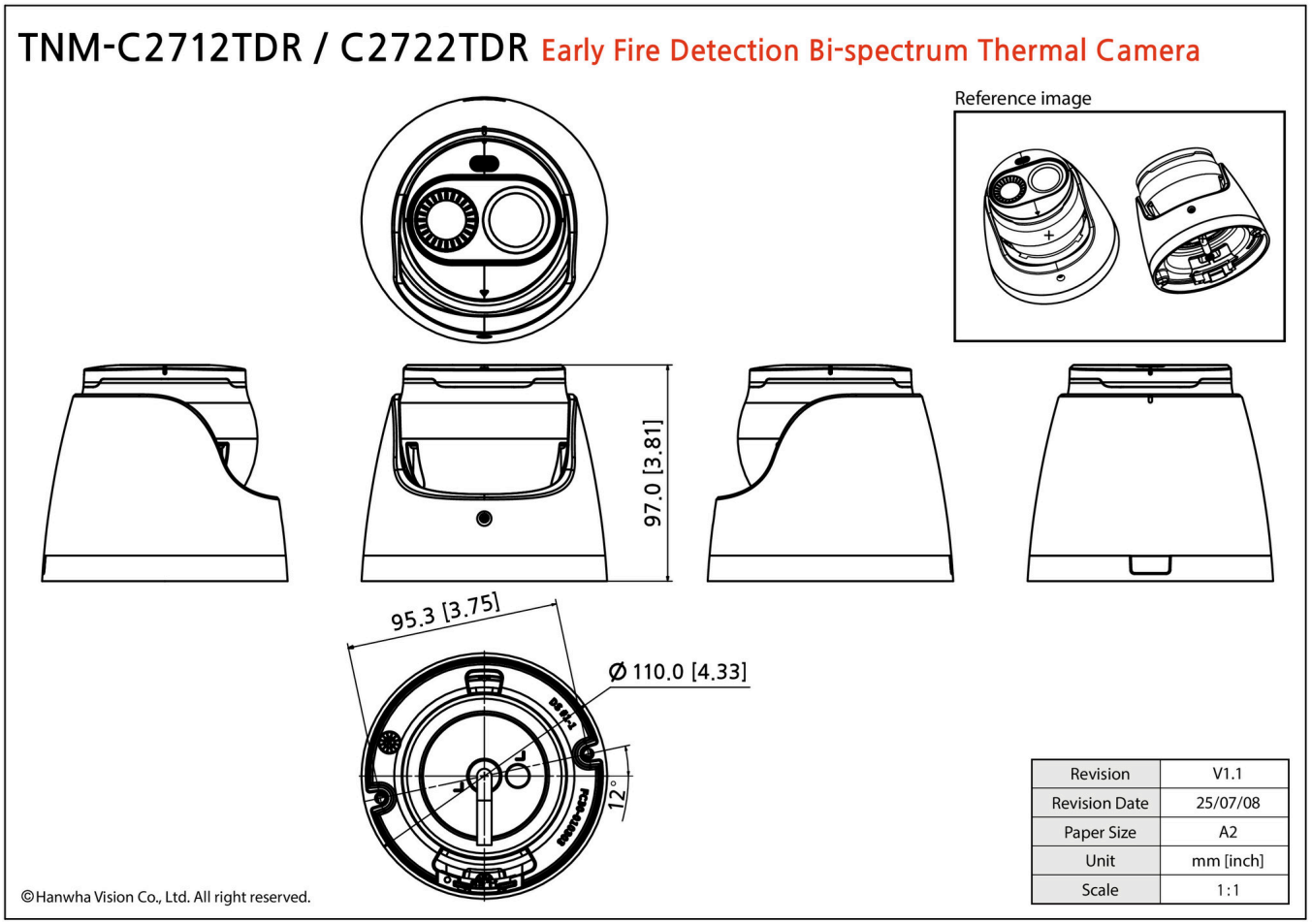
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## CAD

Unit: mm [inch]




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