

APPRO

Bi-Spectral Thermal Network Camera

TC-2230-E50
(PoE)

TC-2230-L50
(4G LTE/RJ-45)

Thermal Res. :
320(H) x 240(V)

MADE IN TAIWAN
台灣製造



LTE transmission



Through fog and haze



Two Lens



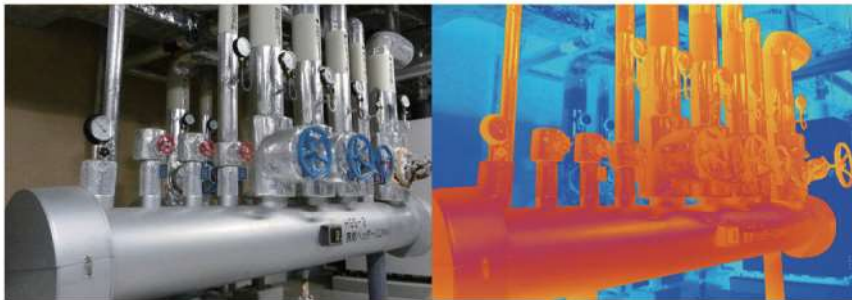
Thermal Image



Alarm notification



Power over Ethernet



- Combines thermal and visual (5MP) video streams
- Thermal sensitivity: ≤ 70 mK @ f#1.0
- Palette
- One IP, bispectral video with temperature information in one stream
- H.264 / H.265 compression video streams
- 4G LTE / RJ-45 or PoE
- Over temperature / Motion detection / Electric fence / Alarm zone / Push notification
- Cloud monitoring and storage
- App / Management / Push notification
- IP66 outdoor protection
- SD card storage

TC-2230 is an outdoor bispectral thermal network camera, which can capture clear color image at a resolution up to 5MP in low lux environment, and built-in white light illumination provides optical surveillance in zero-light conditions up to 5m.

TC-2230 can be used for surveillance of wide range and long distance with thermal vision ability in total darkness. TC-2230 is suitable for border security, devices temperature monitoring, abnormal temperature, etc.

TC-2230-L50 supports 4G LTE technology, which can be installed at anywhere with 4G LTE network coverage.

Bi-Spectral Thermal Network Camera — Specification

| | |
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| Model | TC-2230-L50 TC-2230-E50 |
| Thermal Sensor and Optics | |
| Image Sensor | Uncooled VOx Microbolometer |
| Resolution | 320(H) x 240(V) |
| Thermal Frame Rate | NTSC: 30 fps or PAL: 25 fps |
| Pixel Size | 12µm |
| Spectral Range | 8 ~ 12 µm |
| Sensitivity | NETD ≤ 70mK |
| Color Palettes | 10 |
| Focal Length | Fixed-focal 5mm |
| Aperture | F1.0 |
| Field of View | 42° (Horizontal) / 32.1° (Vertical) |
| Detect temperature range | -20 to 120°C ± 3.0% / 100 to 500°C ± 3% |
| Visible Sensor and Optics | |
| Image Sensor | 1/2.8" 5M CMOS |
| Resolution | 2592(H) x 1944(V) |
| Visible Frame Rate | 15 fps |
| Shutter Speed (Seconds) | 1/8~1/10,000 |
| Minimum Illumination | 1.0 Lux (Color), 0 Lux (white LED ON) |
| White light LED (Illumination Range) | 5m |
| Focal Length | 6mm |
| Aperture | F2.0 |
| Field of View | 51.9° (Horizontal) / 30.6° (Vertical) |
| Video | |
| Video Compression | H.265, H.264, MJPEG |
| Main Stream Thermal and Visible Frame Rate (60Hz)* | 1920 x 1080@30 fps, 1280 x 720@ 30fps, 1024 x 576@ 30fps (The actual setting depends on the UI interface.) |
| Sub Stream Visible Frame Rate (60Hz)* | 2592 x 1944@15 fps, 1920 x 1080@ 30fps, 1280 x 720@30 fps, 1024 x 576@ 30fps (The actual setting depends on the UI interface.) |
| Bit Rate Control | CBR / VBR |
| Bit Rate | 128kbps ~ 8Mbps |
| Wide Dynamic Range (WDR) | DWDR |
| Image Setting | Auto White Balance (AWB) Noise Reduction Flip Mirror Privacy Mask |

| | |
|-----------------------------|--|
| Alarm and Event | |
| Event Trigger | Video Motion Detection Periodic System Boot Network Lost Digital In Temperature Detection |
| Event Action | File Upload Via Email, HTTP, FTP, NAS Server, SD Card |
| Network | |
| Ethernet | RJ-45 (10 / 100Base-T) - TC-2230-L50 PoE (IEEE 802.3af) - TC-2230-E50 |
| Protocol | DDNS, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IPv4, IPv6, 802.1x, NTP, QoS, PPPoE, SNMP SMTP, TCP/IP, UPnP, RTSP, ONVIF (Profiles S) |
| Max. User Access | 5 |
| Storage Card Slot | micro SD SDXC (Max 128GB) |
| Web Viewer | > IE10 / 11, Chrome version 58 or above |
| Smart Phone | Android, iOS |
| 4G (TC-2230-L50) | |
| 4G Frequency | LTE-FDD : B1 / B2 / B3 / B4 / B5 / B7 / B8 / B12 / B13 / B18 / B19 / B20 / B25 / B26 / B28 LTE-TDD : B38 / B39 / B40 / B41 |
| 4G Standard | LTE-TDD / LTE-FDD |
| SIM slot | Micro SIM |
| Interface | |
| Connectors | RS-485 1 Digital Input / 1 Digital Output |
| Power | |
| Input | DC 12V ± 10% |
| Max. Power Consumptions | < 10W |
| Environmental | |
| Operating Temperature | -20 to 60°C |
| Storage Temperature | -40 to 85°C |
| Humidity | ≤ 90% |
| Outdoor Usage | IP66 |
| Dimension and Weight | |
| Casing | Metal |
| Dimension (W x D x H) | 90 × 108.1 × 245.3 mm (TC-2230-L50) 90 × 71 × 123.8 mm (TC-2230-E50) |
| Net Weight | 0.55 KG |
| Safety | |
| Certification | CE, FCC, NCC ,BSMI |