

## IPC-T581H-MU

### 4K Hi-Color Fixed Turret Network Camera



Hi-Color technology provides 24/7 vivid colorful images with F1.0 advanced lenses, high performance sensors and friendly lighting. F1.0 super-aperture collects more light to produce brighter images. Advanced sensor technology can vastly improve the utilization of available light.

- 24/7 colorful imaging
- Scene-adaptive WDR
- Focus on Person and Vehicle classification based on deep learning
- Built-in arrayed dual-microphone for real-time high quality audio security
- White Supplement Light for dark night
- Water and dust resistant (IP67)

## ▪ Specification

| Camera                      |                                                                                                                                                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor                | 1/1.8" Progressive Scan CMOS                                                                                                                                  |
| Max. Resolution             | 3840 × 2160                                                                                                                                                   |
| Min. Illumination           | Color: 0.0005 Lux @ (F1.0, AGC ON), 0 Lux with light                                                                                                          |
| Shutter Time                | 1 s to 1/100,000 s                                                                                                                                            |
| Day & Night                 | IR cut filter                                                                                                                                                 |
| Angle Adjustment            | Pan: 0° to 360°, tilt: 0° to 75°, rotate: 0° to 360°                                                                                                          |
| Lens                        |                                                                                                                                                               |
| Lens Type                   | Fixed focal lens, 2.8 and 4 mm optional                                                                                                                       |
| Focal Length & FOV          | 2.8 mm, horizontal FOV 108.8°, vertical FOV 56.4°, diagonal FOV 134.3°<br>4 mm, horizontal FOV 93.3°, vertical FOV 47.2°, diagonal FOV 114.2°                 |
| Lens Mount                  | M16                                                                                                                                                           |
| Iris Type                   | Fixed                                                                                                                                                         |
| Aperture                    | F1.0                                                                                                                                                          |
| Depth of Field              | 2.8 mm: 3.3 m to ∞<br>4 mm: 3.8 m to ∞                                                                                                                        |
| DORI                        |                                                                                                                                                               |
| DORI                        | 2.8 mm: D: 89 m, O: 35 m, R: 17 m, I: 8 m<br>4 mm: D: 109 m, O: 43 m, R: 21 m, I: 10 m                                                                        |
| Illuminator                 |                                                                                                                                                               |
| Supplement Light Type       | White Light                                                                                                                                                   |
| Supplement Light Range      | Up to 30 m                                                                                                                                                    |
| Video                       |                                                                                                                                                               |
| Main Stream                 | 50 Hz:<br>25 fps (3840 × 2160, 3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)                                                                             |
| Sub-Stream                  | 50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360)                                                                                                              |
| Third Stream                | 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)<br>*Third stream is supported under certain settings.                                           |
| Video Compression           | Main stream: H.265/H.264/H.264+/H.265+,<br>Sub-stream: H.265/H.264/MJPEG,<br>Third stream: H.265/H.264,<br>*Third stream is supported under certain settings. |
| Video Bit Rate              | 32 Kbps to 16 Mbps                                                                                                                                            |
| H.264 Type                  | Baseline Profile, Main Profile, High Profile                                                                                                                  |
| H.265 Type                  | Main Profile                                                                                                                                                  |
| Bit Rate Control            | CBR, VBR                                                                                                                                                      |
| Scalable Video Coding (SVC) | H.264 and H.265 encoding                                                                                                                                      |
| Region of Interest (ROI)    | 1 fixed region for main stream                                                                                                                                |
| Audio                       |                                                                                                                                                               |
| Audio Type                  | Mono sound with built-in dual-mic                                                                                                                             |
| Audio Bit Rate              | 64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/16 Kbps to 64 Kbps (AAC-LC)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)                        |
| Audio Compression           | G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC                                                                                                                      |
| Audio Sampling Rate         | 8 kHz/16 kHz/32 kHz/48 kHz                                                                                                                                    |
| Environment Noise Filtering | Yes                                                                                                                                                           |

| Network                  |                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protocols                | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP, WebSocket, WebSockets, SRTP, SFTP                                                                                                                                                                                               |
| Simultaneous Live View   | Up to 6 channels                                                                                                                                                                                                                                                                                                                                                                      |
| API                      | ONVIF (Profile S, Profile G, Profile T), ISAPI, SDK, ISUP                                                                                                                                                                                                                                                                                                                             |
| User/Host                | Up to 32 users<br>3 user levels: administrator, operator, and user                                                                                                                                                                                                                                                                                                                    |
| Security                 | Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.1/1.2/1.3, host authentication (MAC address) |
| Network Storage          | NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)                                                                                                                                                                                                                                                                                                                                 |
| Client                   | iVMS-4200, Hik-Connect, Hik-Central                                                                                                                                                                                                                                                                                                                                                   |
| Web Browser              | Plug-in free live view: Chrome 80+, Firefox 80+, Edge 89+,<br>Local service: Chrome 80+, Firefox 80+, Edge 89+                                                                                                                                                                                                                                                                        |
| Image                    |                                                                                                                                                                                                                                                                                                                                                                                       |
| Image Parameters Switch  | Yes                                                                                                                                                                                                                                                                                                                                                                                   |
| Image Settings           | Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser                                                                                                                                                                                                                                                           |
| Day/Night Switch         | Day, Night, Auto, Schedule                                                                                                                                                                                                                                                                                                                                                            |
| Image Enhancement        | BLC, HLC, 3D DNR, Distortion Correction, Defog                                                                                                                                                                                                                                                                                                                                        |
| SNR                      | ≥ 52 dB                                                                                                                                                                                                                                                                                                                                                                               |
| Wide Dynamic Range (WDR) | 130 dB                                                                                                                                                                                                                                                                                                                                                                                |
| Image Stabilization      | EIS                                                                                                                                                                                                                                                                                                                                                                                   |
| Privacy Mask             | 4 programmable polygon privacy masks                                                                                                                                                                                                                                                                                                                                                  |
| Interface                |                                                                                                                                                                                                                                                                                                                                                                                       |
| Ethernet Interface       | 1 RJ45 10 M/100 M self-adaptive Ethernet port                                                                                                                                                                                                                                                                                                                                         |
| On-Board Storage         | Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 512 GB                                                                                                                                                                                                                                                                                                     |
| Audio                    | Built-in Microphone:<br>Arrayed dual-microphone                                                                                                                                                                                                                                                                                                                                       |
| Reset Key                | Yes                                                                                                                                                                                                                                                                                                                                                                                   |
| Event                    |                                                                                                                                                                                                                                                                                                                                                                                       |
| Basic Event              | Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception                                                                                                                                                                                                                                                           |
| Smart Event              | Scene change detection                                                                                                                                                                                                                                                                                                                                                                |
| Linkage                  | Upload to FTP/NAS/memory card, notify surveillance center, trigger recording, trigger capture, send email                                                                                                                                                                                                                                                                             |
| Deep Learning Function   |                                                                                                                                                                                                                                                                                                                                                                                       |
| Face Capture             | Yes                                                                                                                                                                                                                                                                                                                                                                                   |
| Perimeter Protection     | Line crossing, intrusion, region entrance, region exiting<br>Support alarm triggering by specified target types (human and vehicle)                                                                                                                                                                                                                                                   |

| General                          |                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power                            | 12 VDC $\pm$ 25%, 0.7 A, max. 8.5 W, $\varnothing$ 5.5 mm coaxial power plug, reverse polarity protection,<br>PoE: IEEE 802.3af, Class 3, max. 11 W                                                                                                                                                                                                   |
| Material                         | Cover: Metal, main body: Metal                                                                                                                                                                                                                                                                                                                        |
| Dimension                        | $\varnothing$ 138.3 mm $\times$ 115.4 mm ( $\varnothing$ 5.4" $\times$ 4.5")                                                                                                                                                                                                                                                                          |
| Package Dimension                | 170 mm $\times$ 170 mm $\times$ 160 mm (6.7" $\times$ 6.7" $\times$ 6.3")                                                                                                                                                                                                                                                                             |
| Weight                           | Approx. 750 g (1.7 lb.)                                                                                                                                                                                                                                                                                                                               |
| With Package Weight              | Approx. 1140 g (2.5 lb.)                                                                                                                                                                                                                                                                                                                              |
| Storage Conditions               | -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)                                                                                                                                                                                                                                                                             |
| Startup and Operating Conditions | -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)                                                                                                                                                                                                                                                                             |
| General Function                 | Heartbeat, mirror, flash log, password reset via email, pixel counter, anti-banding                                                                                                                                                                                                                                                                   |
| Language                         | 33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian |
| Approval                         |                                                                                                                                                                                                                                                                                                                                                       |
| EMC                              | CE-EMC: EN 55032:2015+A1:2020, EN 50130-4:2011+A1:2014, EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021,<br>RCM: AS/NZS CISPR 32: 2015,<br>IC: ICES-003: Issue 7,<br>KC: KN32: 2015, KN35: 2015                                                                                                                                      |
| Safety                           | UL: UL 62368-1,<br>CB: IEC 62368-1: 2014+A11,<br>CE-LVD: EN 62368-1: 2014/A11: 2017                                                                                                                                                                                                                                                                   |
| Environment                      | CE-RoHS: 2011/65/EU                                                                                                                                                                                                                                                                                                                                   |
| Protection                       | IP67: IEC 60529-2013                                                                                                                                                                                                                                                                                                                                  |

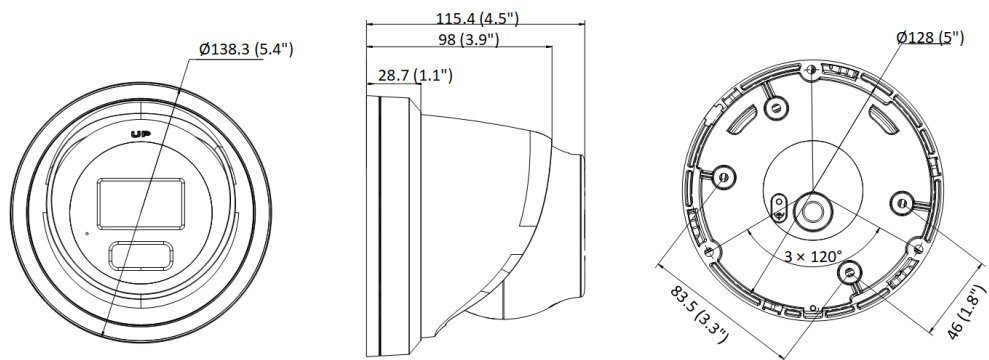
## ▪ Available Model

IPC-T581H-MU(2.8mm)

IPC-T581H-MU(4mm)

IPC-T581H-MU(2.8mm)/Black

## ▪ Dimension



Unit: mm (inch)

## ▪ Accessory

## ▪ Optional

| DS-1273ZJ-140<br>Wall mount           | DS-1273ZJ-140B<br>Wall mount | DS-1271ZJ-140<br>Pendant Mount | DS-1275ZJ-SUS<br>Vertical pole mount | DS-1276ZJ-SUS<br>Corner mount |
|---------------------------------------|------------------------------|--------------------------------|--------------------------------------|-------------------------------|
|                                       |                              |                                |                                      |                               |
|                                       |                              |                                |                                      |                               |
| <b>DS-1280ZJ-PT6<br/>Junction box</b> |                              |                                |                                      |                               |
|                                       |                              |                                |                                      |                               |
|                                       |                              |                                |                                      |                               |