



Network

## PNM-C20000QB

2MP x 4CH AI remote-head Camera



### Key Features

- Object detection (Person/Face/Vehicle/License plate), IVA (Virtual line/Area, Enter/Exit, Loitering, Direction, Intrusion), Shock detection
- Business intelligence based on AI engine :  
People/Vehicle counting
- Support 4 audio input / 1 audio output
- Support HDMI connector
- Unicast(20 users) / Multicast
- Multiple streaming(Up to 4 profiles per channel)
- WiseStream (Based on AI engine)
- Secure element(FIPS 140-3 level3, CC EAL6+)

### Compatible Devices



SLA-T4680DA

SLA-T4680DSA

# PNM-C20000QB

2MP x 4CH AI remote-head Camera



## Specifications

| Video                       |                |                                                                                                                                                                                                 |
|-----------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Resolution                  |                | 2592x1944, 2560x1440, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240, 320x180                                                |
| Max. Framerate              | H.265/H.264    | 30fps/25fps(60Hz/50Hz)                                                                                                                                                                          |
|                             | MJPEG          | 30fps                                                                                                                                                                                           |
| Video Out                   |                | USB: Micro USB Type C, HDMI(Single/Quad view)                                                                                                                                                   |
| Lens                        |                |                                                                                                                                                                                                 |
| Optional Lens               |                | SLA-T1080FA, SLA-T2480A, SLA-T2480VA, SLA-T4680A, SLA-T4680VA, SLA-T4680DA, SLA-T4680DSA, SLA-T2480WDA, SLA-T2480WA, SLA-T2880BA, SLA-F1080FA, SLA-F2480A, SLA-F2480VA, SLA-F4780A, SLA-F4780VA |
| Operational                 |                |                                                                                                                                                                                                 |
| Day & Night                 |                | Auto(Electrical)                                                                                                                                                                                |
| Backlight Compensation      |                | BLC, WDR, SSDR                                                                                                                                                                                  |
| Wide Dynamic Range (dB)     |                | 120                                                                                                                                                                                             |
| Digital Noise Reduction     |                | WiseNR II (Based on AI engine), SSNR V                                                                                                                                                          |
| Digital Image Stabilization |                | Support                                                                                                                                                                                         |
| Defog                       |                | Support                                                                                                                                                                                         |
| Motion Detection            | Quantity       | 8ea                                                                                                                                                                                             |
|                             | Shape          | 8point Polygonal zones                                                                                                                                                                          |
| Privacy Masking             | Quantity       | 16ea                                                                                                                                                                                            |
|                             | Shape          | 4point Quadrangle zones                                                                                                                                                                         |
|                             | Color / Option | Gray, Green, Red, Blue, Black, White                                                                                                                                                            |
| Gain Control                |                | Low, Middle, High                                                                                                                                                                               |
| White Balance               |                | ATW, AWC, Manual, Indoor, Outdoor                                                                                                                                                               |
| LDC                         |                | Support                                                                                                                                                                                         |
| Electronic Shutter          | Mode           | Minimum, Maximum, Anti flicker                                                                                                                                                                  |
|                             | Speed Range    | 2~1/12,000sec                                                                                                                                                                                   |
| Video Rotation              |                | Flip, Mirror, Hallway view(90°/270°) - Each channel separately                                                                                                                                  |
| Alarm Interface             | In/Out         | 4 configurable I/O ports                                                                                                                                                                        |

## Operational

|                                          |                                                                                                                                                                                                                                          |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alarm Triggers                           | Analytics, Network disconnect, Alarm input, App event, Time schedule, MQTT subscription                                                                                                                                                  |
| 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, Alarm output,<br>Handover: PTZ preset, send message by HTTP/HTTPS/TCP, Audio clip playback,<br>MQTT: publication |
| Audio In                                 | 4 x Selectable(mic in/line in)                                                                                                                                                                                                           |
| Audio Out                                | Line out                                                                                                                                                                                                                                 |

## Analytics

|                        |                    |                                                                                                                   |
|------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------|
| Classified Object Type |                    | Person, Face, Vehicle, License plate                                                                              |
| Attributes             | Person             | Upper/Lower clothes color                                                                                         |
|                        | Vehicle            | Type(car, bus, truck, motorcycle, bicycle), Color                                                                 |
| Thumbnail              |                    | BestShot                                                                                                          |
| Analytics Events       | Based on AI Engine | Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear) |
|                        | Normal             | Defocus detection, Motion detection, Tampering, Audio detection, Shock detection                                  |
| Business Intelligence  | Based on AI Engine | People counting, Vehicle counting                                                                                 |

## Network

|                                   |                    |                                                                                                                                                                                                                                       |
|-----------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethernet                          |                    | Metal shielded RJ-45(10/100/1000BASE-T)                                                                                                                                                                                               |
| Video Compression                 |                    | H.265/H.264: Main/Baseline/High, MJPEG                                                                                                                                                                                                |
| Audio Compression                 |                    | G.711(PCM): 8kHz(64kbps),<br>G.726(ADPCM): 8kHz(16/24/32/40kbps),<br>AAC-LC: 16kHz(48kbps)                                                                                                                                            |
| Smart Codec                       |                    | WiseStream(Based on AI engine)                                                                                                                                                                                                        |
| Bitrate Control                   |                    | H.265/H.264: CBR or VBR,<br>MJPEG: VBR                                                                                                                                                                                                |
| Streaming                         | Unicast            | Up to 20 users                                                                                                                                                                                                                        |
|                                   | Multicast          | Support                                                                                                                                                                                                                               |
|                                   | Multiple Streaming | Up to 4 profiles                                                                                                                                                                                                                      |
| Protocol                          |                    | IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SFTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT, SMTP(StartTLS) |
| Application Programming Interface | ONVIF              | S, G, T, M                                                                                                                                                                                                                            |
|                                   | Others             | SUNAPI(HTTP API), Hanwha Vision Open Platform                                                                                                                                                                                         |
| Direct Cloud Connection           |                    | Optional (needs gateway)                                                                                                                                                                                                              |

## Security

|                        |                                                    |
|------------------------|----------------------------------------------------|
| OS / Firmware Protect  | Encrypted firmware, Secure boot, Signed firmware   |
| User authentication    | Digest authentication                              |
| Network authentication | IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2) |

## Security

|                      |                                                                         |
|----------------------|-------------------------------------------------------------------------|
| Secure Communication | HTTPS, WSS(WebSocket Secure), SRTP                                      |
| Access Control       | IP-based access control                                                 |
| Data Protect         | Encryption credentials, Encrypt compress for live recording file export |
| Audit                | Access / System / Event Log management                                  |
| Device ID            | Device certificate(Hanwha Vision Root CA)                               |
| Secure Storage       | SDcard partition encrypt(AES-256), Secure element                       |
| Security Certificate | Secure element(FIPS 140-3 level3, CC EAL6+), ETSI EN 303 645            |

## General

|              |                    |                             |
|--------------|--------------------|-----------------------------|
| Memory       | RAM                | 8GB                         |
|              | Flash              | 8GB                         |
| Edge Storage | Micro SD/SDHC/SDXC | Max. 1TB x 2slot(Total 2TB) |

## Environmental & Electrical

|                     |             |                                  |
|---------------------|-------------|----------------------------------|
| Operating Condition | Temperature | -10°C~+45°C(+14°F~+113°F)        |
|                     | Humidity    | 0~95% RH(non-condensing)         |
| Storage Condition   | Temperature | -50°C~+60°C(-58°F~+140°F)        |
|                     | Humidity    | 0~90% RH(non-condensing)         |
| Input Voltage       |             | PoE+(IEEE802.3at, Class4), 12VDC |
| Power Consumption   | PoE         | Max. 25.5W, typical 23.8W        |
|                     | 12VDC       | Max. 23.1W, typical 21.5W        |

## Mechanical

|                     |             |                                                                                                                                                            |
|---------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Color               |             | Black                                                                                                                                                      |
| Material            |             | Plastic                                                                                                                                                    |
| Material Management | Declaration | RoHS(EU RoHS directive 2011/65/EU and IEC/EN 63000:2018), REACH(Regulation (EC) No. 1907/2006), Conflict mineral policy(Section 1502 of US Dodd Frank Act) |
| RAL Code            |             | RAL9005                                                                                                                                                    |
| Product Dimensions  |             | 200(W)x37(H)x146(D)mm(7.87x1.46x5.75")                                                                                                                     |
| Product Weight      |             | 1,015g(2.24lb)                                                                                                                                             |

## 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                                                                                                                                                         |
| Environment | IEC/EN 63000                                                                                                                                                                                             |

## Compatible lenses



| Video                   |                       | SLA-T2480A | SLA-T2480VA | SLA-T4680A |
|-------------------------|-----------------------|------------|-------------|------------|
| Imaging Device          | Size                  | 1/2.8"     | 1/2.8"      | 1/2.8"     |
|                         | Type                  | CMOS       | CMOS        | CMOS       |
| Min. Illumination (Lux) | Color(1/30sec, 30IRE) | 0.045      | 0.045       | 0.06       |
|                         | BW(1/30sec, 30IRE)    | 0.045      | 0.045       | 0.06       |

## Lens

|                                |            |                               |                               |                               |
|--------------------------------|------------|-------------------------------|-------------------------------|-------------------------------|
| Focal Length (mm)              |            | 2.4                           | 2.4                           | 4.6                           |
| Max. Aperture Ratio (F number) | Wide       | 2.0                           | 2.0                           | 2.5                           |
| Angular Field of View          | Horizontal | 138°                          | 138°                          | 73°                           |
|                                | Vertical   | 73°                           | 73°                           | 39°                           |
|                                | Diagonal   | 165°                          | 165°                          | 85°                           |
| Mount Type                     |            | RJ12 connected with main unit | RJ12 connected with main unit | RJ12 connected with main unit |
| Focus Control                  |            | Fixed                         | Fixed                         | Fixed                         |

## Mechanical

|                    |             |                 |             |
|--------------------|-------------|-----------------|-------------|
| Color              | Black       | Black           | Black       |
| Material           | Plastic     | Metal, Plastic  | Plastic     |
| Product Dimensions | Ø24xL49.8mm | W30xH27.9xD45mm | Ø24xL49.8mm |
| Product Weight     | 318g        | 328g            | 310g        |