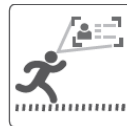


### 2MP 32X Ultra-Starlight IR Network PTZ Camera



VTC-S21-IR-32X



Smart Tracking



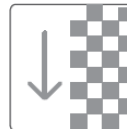
Ultra Starlight



True WDR



Day/Night



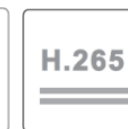
3D DNR



PoE++



IP67



H.265



### System

VTC-S21-IR-32X, 2MP 32X ultra-starlight IR network PTZ camera is a new design for human or vehicle detection & auto-tracking applications. The 1.0Tops high computing power could classify max 30 objects per second, when any of them intrude restricted area, the PTZ camera will trace, zoom fit in center of screen, snap and record and trigger alert. To improve monitoring and detecting range, the gimbals are re-designed to expand vertical rotation range to 180°, elevation angle is raised to -25°, and rotation speed doubles to 240%. With the 32x powerful lens, this model could offer great detail over wide range, capture human faces at 400m away, or detect human body at 2km away. The camera could recognize faces at least 200m away, even in the near complete darkness, by the contribution of 1/1.8" large CMOS sensor and high-power LED arrays. The VTC-S21-IR-32X is designed for 7/24 work in harsh outdoor weather, with metal shield, built-in turbo fan, thermal sensor, high power heater and thermal management, which even could cold start -40°C.

### Key Spec:

- 1/1.8" progressive scan CMOS
- Up to 1920x1080 resolution.
- Mini illumination:
  - Color: 0.002 lux @ (F1.5 AGC ON)
  - B/W: 0.0004 lux @ (F1.5 AGC ON)
  - 0 Lux with IR
- 32x optical zoom, 16x digital zoom
- 120 dB WDR, 3D DNR, Smart IR
- Up to 200m IR distance
- Smart H.265/H.264 video compression
- 1.0 Tops Deep-learning Engine
- Smart tracking of human/vehicle
- Smart detection and perimeter precaution
- Metal Body, IP67, -50°C~65°C
- PoE++ and DC/AC24V

### Application:

Wide range area intrusion, perimeter protection and alarm, such as parks, scenic spots, stations and venues, industrial park.

## SPECIFICATION:

| <b>Camera Module</b> |  |
|----------------------|--|
| System               | Hi3516DV300,2GB LPDDR3, 4GB FLASH  |
| Image sensor         | 1/1.8" progressive scan CMOS   |
| Mini. Illumination   | Color: 0.002Lux @ (F1.5, AGC ON); B/W: 0.0004Lux @ (F1.5, AGC ON); 0Lux with IR  |
| Image setting        | Flip, Mirror, Saturation, Brightness, Contrast, Sharpness, AGC, and AWB adjusted by client software/browser  |
| Shutter Speed        | 1/1 s – 1/10,000 s   |
| White Balance        | Auto/Manual/Indoor/Outdoor   |
| Gain                 | Auto/Manual  |
| Day & Night          | IR Cut filter  |
| Digital Zoom         | 16x  |
| Privacy Mask         | 4 Programmable privacy masks   |
| 3D DNR               | Auto/Manual  |
| BLC                  | Yes  |
| HLC                  | Yes  |
| WDR                  | 120 dB   |
| Defog                | Electronic   |
| EIS                  | Yes  |
| Regional Exposure    | No   |
| Picture overlay      | Logo picture could be overlaid on video with 128x128pixels,24bits BMP format   |
| <b>Lens</b>          |  |
| Focus length         | f=5.6 ~ 179.2 mm lens,32x optical  |
| Zoom Speed           | Approx. 4.2s (optical zoom, wide-tele)   |
| Field of View        | Horizontal:59.8 °to 2.3 °(wide-tele); Vertical: 33.6 °to 1.3 °(wide-tele); Diagonal: 68.6 °to 2.6 °(wide-tele)   |
| Working distance     | wide: 1.0m ~ INF; tele: 1.5m ~ INF   |
| Aperture Range       | F1.55 ~ F3.4 (wide-tele)   |
| <b>PTZ</b>           |  |
| Pan Range            | 360 °endless   |
| Pan speed            | Configurable, from 0.1~240 %s; Preset speed: 240 %s  |
| Tilt Range           | From -25 °to 180 ° (auto-flip at 90 °)   |
| Tilt Speed           | Configurable, from 0.1 ~ 180 %s, Preset speed: 180 %s  |
| Proportional Zoom    | Yes  |
| Preset               | 300  |
| Cruise               | 8 cruises, up to 16 presets for each cruises   |
| Track                | 4 tracks, record time over 3 minutes for each track  |
| Power off memory     | Support  |
| Action mode          | Preset/Cruise/Trace/Auto Scan/Random Scan  |
| 3D Positioning       | Support  |
| PTZ Position Display | Support  |
| Schedule Task        | Preset/Cruise/Trace/Random Scan/Boundary Scanning /Dome reboot   |
| <b>IR</b>            |  |
| IR Distance          | 200m (656 f.t.), 10x IR LEDs   |
| Smart IR             | Yes  |
| <b>Network</b>       |  |
| Max Resolution       | 1920x1080  |
| Main stream          | 1920 × 1080, 1280 × 960, 1280 × 720 (25/30fps)   |
| Sub stream           | 25fps (704 × 576, 640 × 480, 352 × 288)<br>30fps (704 × 480, 640 × 480, 352 × 240)   |
| Third Stream         | 25fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288)<br>30fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) |
| SVC                  | Yes  |
| Video compression    | Smart H.265/H.264/MJPEG  |

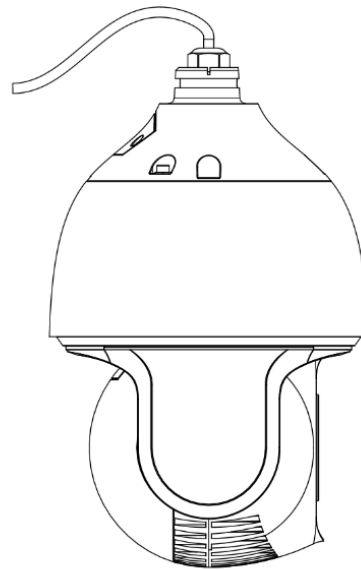
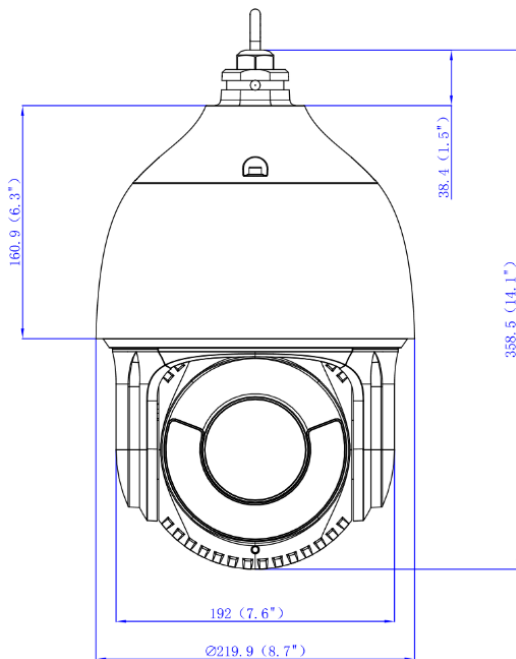
|                           |   |
|---------------------------|---|
| Audio compression         | G.711 A/U   |
| Audio Enhancement         | No  |
| Protocols                 | HTTP, HTTPS, IPv4/IPv6, 802.1x, QoS, FTP, SMTP, UPnP, SNMP,DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP,DHCP, PPPoE   |
| Simultaneous live view    | Up to 6 channels  |
| User / Host               | Up to 16 users, 3 levels: Administrator, Advanced User and Normal User  |
| Security Measures         | User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption, IEEE802.1x port-based network access control; IP address filtering  |
| <b>Smart Features</b>     |   |
| Basic event               | Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, SD full, SD error) , defocus detection   |
| Face recognize /compare   | Default off, Max 30 human faces per second.   |
| People density / LPR      | Not support by this software version  |
| Smart Detection           | Intrusion detection, Line crossing detection, Region entrance detection, Region exiting detection, Unattended baggage detection, Object removal detection, Scene change detection, Support alarm triggering by human or vehicle, filtering flag/animal. |
| Smart Tracking            | Manual Tracking, Auto Tracking (human or vehicle)   |
| <b>System Integration</b> |   |
| External Alarm Interface  | 2CH alarm input; 2CH alarm output   |
| External Audio Interface  | 1CH audio input, 2 to 2.4v[p-p] 1K $\Omega$ $\pm$ 10%; 1CH audio output (line out), impedance: 600 $\Omega$   |
| Alarm Linkage             | Alarm actions, such as Preset, Cruise, Track, Memory Card Video Record, Trigger Recording, Notify Surveillance Center, Upload to FTP/Memory Card, Send Email, etc.  |
| Network Interface         | 1 RJ45 10M/100M Adaptive Ethernet (Support PoE 802.3.bt,class 7)  |
| CVBS                      | Yes, 1 BNC connector  |
| RS 485                    | Pelco-D / P protocol, custom protocols available  |
| Storage                   | On-Body memory card slot, support microSD/SDHC/SDXC, up to 256G   |
| API                       | ONVIF, support SDK and third-party management platform  |
| Client                    | N9000 1.4.5, NVMS 2.0; and the third-party client   |
| Web Browser               | IE(8-11);Firefox( below 44);Chrome(below 76); Not support Safari  |
| <b>General</b>            |   |
| Power                     | AC24V, DC24V,PoE+ (802.3.bt, class 7), (Max 50W, include IR on, Heater on, Fan working)   |
| Working condition         | -50 $^{\circ}$ C ~ 65 $^{\circ}$ C (-58 $^{\circ}$ F ~ 149 $^{\circ}$ F),90%RH less (non-condensing),Cold start at - 40 $^{\circ}$ C  |
| Storage condition         | -40 $^{\circ}$ C ~ 70 $^{\circ}$ C ; $\leq$ 95% RH  |
| Protection                | IP67, 6000V Lightning Protection, Surge Protection and Voltage Transient Protection   |
| Material                  | Aluminum Alloy; PC+10% GF   |
| Dimensions                | $\Phi$ 219.9mm x H 358.5mm( $\Phi$ 8.7" x 14.1")  |
| Weight                    | Approx. 6.0 Kg (13.22 lb.)  |
| Certification             | IP67,ROHS, CE, FC   |

### DORI table

It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015.

| DORI     | Detect<br>(human behaviours) | Observe<br>(as Court level evidence) | Recognize<br>(face ID, CPL) | Identify<br>(human and his photo) |
|----------|------------------------------|--------------------------------------|-----------------------------|-----------------------------------|
| Define   | 25Pixels/meter               | 63Pixels/meter                       | 125Pixels/meter             | 250pixels/meter                   |
| Distance | 2000m/6561ft                 | 800m/2624ft                          | 400m/1312ft                 | 200m/656ft                        |

#### Dimensions:



Unit: mm(inch)

#### Ordering information

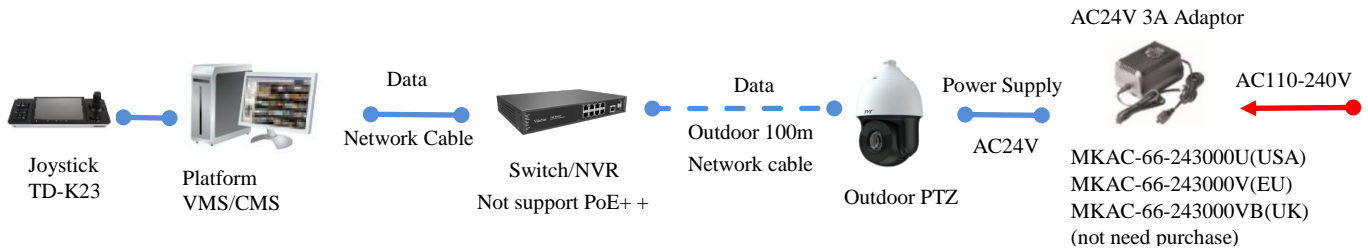
|        |                |   |
|--------|----------------|---|
| Camera | VTC-S21-IR-32X | 2MP 32X Ultra starlight IR 200m Network PTZ camera, smart tracking, AC24V/DC24V/PoE++, IP67,-50°C~65°C,include wall mount bracket and power adaptor |
|--------|----------------|---|

#### Mounting Brackets Options:

| TD-YZJ0306<br>Wall mount | TD-YZJ0305+YZJ0501<br>Pole Mount | TD-YZJ0305+YZJ0601<br>Corner Mount | TD-YZJ0807<br>Pendant mount |
|--------------------------|----------------------------------|------------------------------------|-----------------------------|
|                          |                                  |                                    |                             |

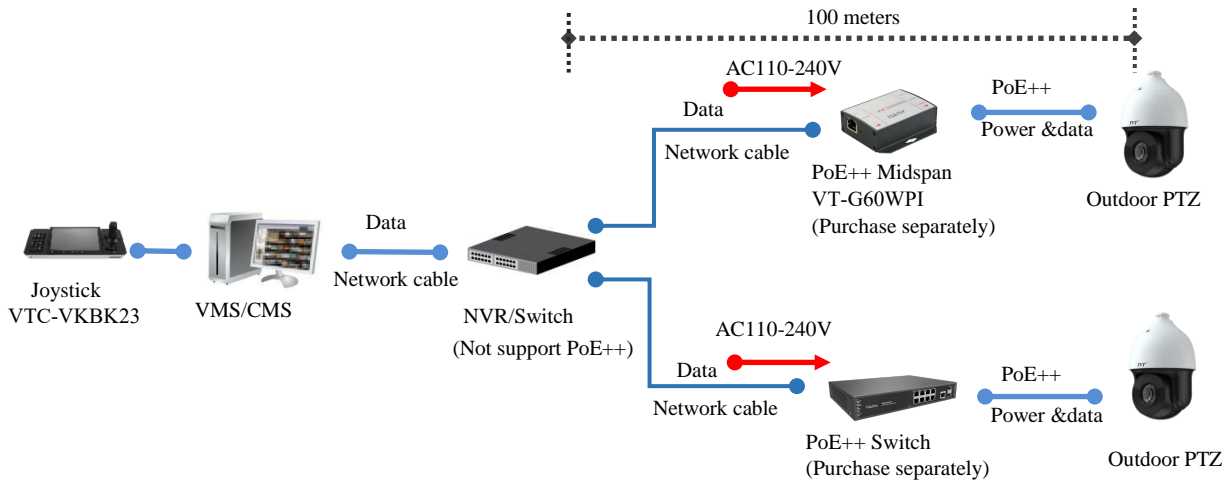
### Connection Options:

#### ● Legacy connection mode



#### ● PoE+ mode

TVT has only PoE+ class NVR(802.3.at), no PoE++ class NVR yet, so it need PoE++ Midspan or Switch for PoE++ connection



\* All accessories listed here have been tested for compatibility, other vendors are not guaranteed

\* All pictures and texts are for reference only. Actual product may vary due to product enhancement.