4MP 32X Starlight IR Network PTZ Camera

TD-8643IM (PE/32M/AR20)
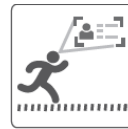
Smart Tracking	Starlight	True WDR	Day/Night
3D DNR	PoE++	IP67	H.265

CE FC Onvif
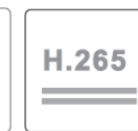
System

TD-8643IM(PE/32M/AR20),4MP 32X Starlight IR network PTZ camera is a new design for human/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°/s. With the 32x powerful lens, this model could offer great detail over wide range, capture human faces at 520m away, or detect human body at 2.6km 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 8623IM is designed for 7/24 work in harsh outdoor weather, with full metal shield ,built-in turbo fan, thermal sensor, high power heater, which even could cold start at -40℃.

Key Spec:

- 1/1.8″ progressive scan CMOS
- Up to 4MP (2560x1440) resolution.
- Mini illumination:
    Color: 0.005 lux @ (F1.5 AGC ON)
    B/W: 0.001 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℃~65℃
- PoE++ and DC/AC24V

Application:

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

SPECIFICATION:

| Camera Module	
System	Hi3516DV300,2GB LPDDR3, 4GB EMMC, product active till Dec,2022
Image sensor	1/1.8" progressive scan CMOS
Mini. Illumination	Color：0.005 Lux @ (F1.5，AGC ON)；B/W：0.001 Lux @(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
Lens	
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)
PTZ	
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/Track/Auto Scan/Random Scan
3D Positioning	Support
PTZ Position Display	Support
Schedule Task	Preset/Cruise/Track/Random Scan/Boundary Scanning /Dome reboot
IR	
IR Distance	200m (656 f.t.)，10x IR LEDs
Smart IR	Yes
Network	
Max Resolution	2560 ×1440
Main stream	2560 ×1440, 2048 ×1536, 1920 ×1080, 1280 ×960, 1280 ×720　(25/30fps)
Sub stream	50Hz: 25fps (704 ×576, 640 ×480, 352 ×288) 60Hz: 30fps (704 ×480, 640 ×480, 352 ×240)
Third　Stream	50Hz: 25fps (1920 ×1080, 1280 ×960, 1280 ×720, 704 ×576, 640 ×480, 352 ×288) 60Hz: 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
Smart Features	
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)
System Integration	
External Alarm Interface	2CH alarm input; 2CH alarm output
External Audio Interface	1CH audio input, 2 to 2.4v[p-p] 1KΩ ±10%; 1CH audio output (line out), impedance: 600Ω
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 TVT SDK and third-party management platform
Client	TVT N9000 1.4.5, TVT NVMS 2.0; and the third-party client
Web Browser	IE(8-11);Firefox(below 44);Chrome(below 76); Not support Safari
General	
Power	AC24V, DC24V,PoE+ (802.3.bt, class 7), (Max 50W, include IR on, Heater on, Fan working)
Working condition	-50 ℃ ~ 65 ℃ (-58 ℉ ~ 149 ℉),90%RH less (non-condensing),Cold start at - 40 ℃
Storage condition	-40°C ~ 70°C ; ≤ 95% RH
Protection	IP67, 6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Material	Aluminum Alloy; PC+10% GF
Dimensions	⌀ 219.9mm x H 358.5mm(⌀ 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 (human behaviours)	Observe (as Court level evidence)	Recognize (face ID, CPL)	Identify (human and his photo)
Define	25Pixels/meter	63Pixels/meter	125Pixels/meter	250pixels/meter
Distance	2600m/8530ft	1060m/3477ft	520m/1706ft	260m/853ft

Dimensions:
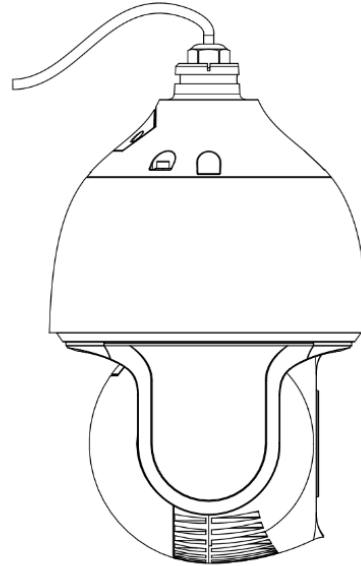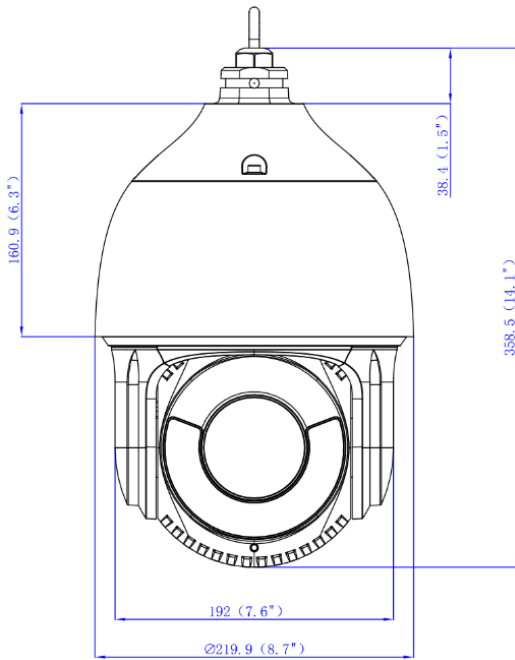
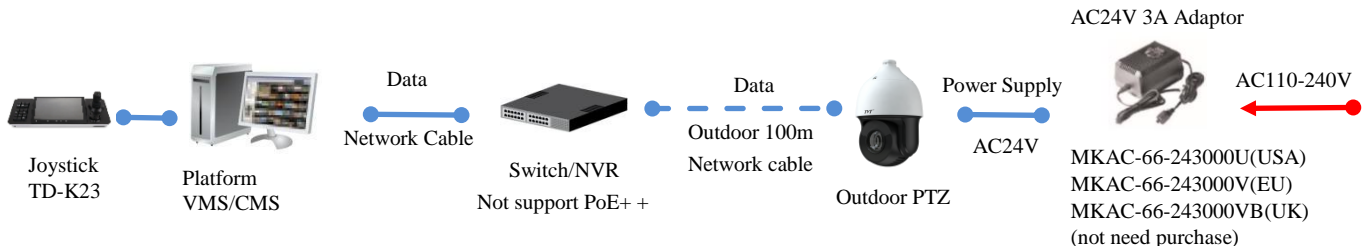Unit: mm(inch)

Ordering information

Camera	TD-8643IM(PE/32M/AR20)	4MP 32X starlight IR 200m Network PTZ camera, smart tracking,AC24V/DC24V/PoE++, IP67,-50℃~65℃,include wall mount bracket and AC24V/3A adaptor

Mounting Brackets Options:

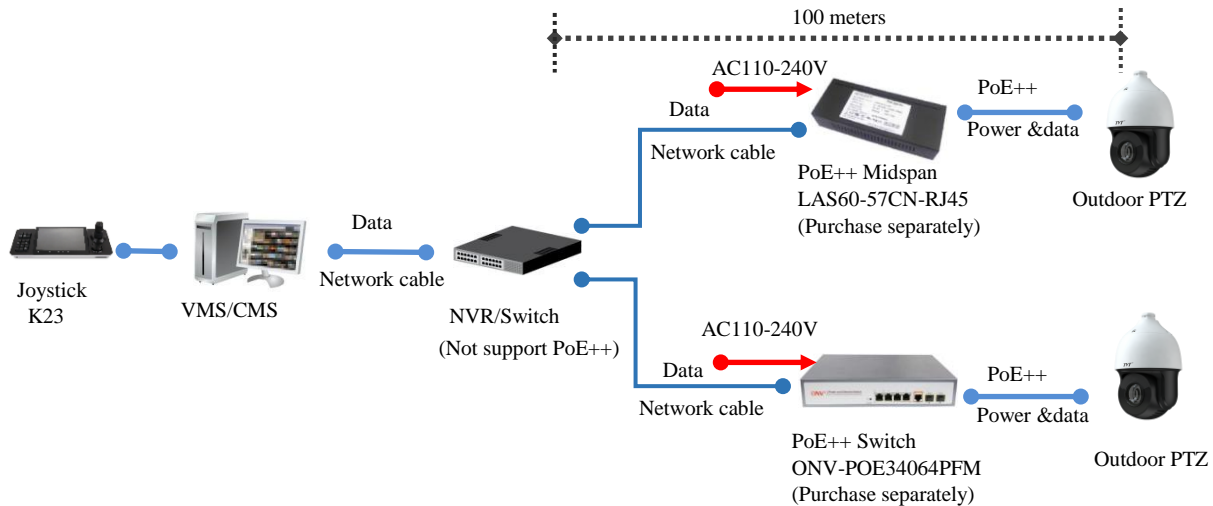| TD-YZJ0306 Wall mount	TD-YZJ0305+YZJ0501 Pole Mount	TD-YZJ0305+YZJ0601 Corner Mount	TD-YZJ0807 Pendant mount

Connection Options:

- **Legacy connection mode**

AC24V 3A Adaptor

| Joystick TD-K23 | Platform VMS/CMS | Data Network Cable | Switch/NVR Not support PoE+ + | Data Outdoor 100m Network cable | Outdoor PTZ | Power Supply AC24V | AC110-240V |

MKAC-66-243000U(USA)
MKAC-66-243000V(EU)
MKAC-66-243000VB(UK)
(not need purchase)

- **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

100 meters

AC110-240V

Data
Network cable

PoE++
Power &data

PoE++ Midspan
LAS60-57CN-RJ45
(Purchase separately)

Outdoor PTZ

| Joystick K23 | VMS/CMS | Data Network cable | NVR/Switch (Not support PoE++) |

AC110-240V

Data
Network cable

PoE++
Power &data

PoE++ Switch
ONV-POE34064PFM
(Purchase separately)

Outdoor PTZ

* 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.