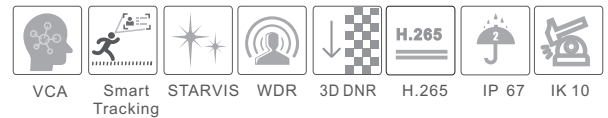


4MP 37x 500m Laser AI Network Speed Dome



TD-8843IM (PE/WP/37M/VL50)
TD-8843IM (PE/37M/VL50)

- 1/1.8" 4MP CMOS
- 120dB WDR, 3D DNR, HLC, smart supplementary light
- Min.Illumination : Color: 0.005 lux (F1.5, AGC ON);
B/W : 0.001 lux(F1.5, AGC ON); 0 lux with laser
- Powerful 37 x optical zoom; 16x digital zoom
- Max.2560×1440@60fps, H.265 coding
- 500 m VCSEL IR laser distance
- 2.0 Tops CNN, IVE and video DSP
- People/vehicles recognition and tracking
- Four scenario modes: Perimeter, FR, LPR, mixture lanes
- Automatic wiper (optional)
- AC24V/DC24V/Hi-PoE power supply
- IK10, IP67, -50°C~+65°C



System Overview

TVT 8843IM adopts 1/1.8" progressive scan CMOS chip. With the powerful 37x optical zoom lens and accurate pan/tilt/zoom performance, the camera provides a wide monitoring range and more details. The camera delivers 4MP ultra high definition resolution at 50/60fps. With the smooth control, high quality image and good protection, it targets high-end video surveillance applications, such as rivers, forests, roads, railways, airports, squares, parks, scenic spots, stations and large venues, etc.

Features

• Artificial Intelligent

Integrated with 2.0 Tops CNN deep-learning Engine and powerful CV and video DSP, this products can switch among four scenarios-face recognition(FR), license plate recognition(LPR), (human and vehicle)mixture lanes detection mode. Up to 30 targets can be detected simultaneously. Additionally, the PTZ support human/car recognition and real-time auto zoom tracing.

• Superior Image Quality

The product adopts high MTF 37x zoom lens and 1/1.8" back-illuminated Near-IR enhanced image sensor, and 3rd generation of image signal processor, so the better image quality could be achieved. In most night scenarios, a vivid color image is output without switching to W/B mode. Most street lamp and car's lamp smear could be suppressed for its high dynamic range.

• Optical Defogging Lens

Generally, visible light could pass through raindrops, haze and fog in the air only in a short range. Within the built-in defogging lens filter, the camera can switch to 900nm-1150nm mid-wave infrared imaging on a foggy/rainy day. As MWIR light from the target has more chance to pass through the raindrops, fog and haze in the air, the visibility of the camera is twice as far as normal cameras.

• Sync-Zoomed VCSEL Laser Illuminator

The product adopts a sync-optical zoomed VCSEL (vertical-cavity-surface-emitting) laser illuminator. The VCSEL has more efficient and longer life than traditional laser light source. The laser lens zooms synchronously with the image lens, so the IR(W/B) image effect could be more even and no breaking in camera's zoom actions. Even on a moonless night, the camera could still distinguish human face 400m (LP 500m) far away.

• H.265 Encoding

The H.265 (ITU-T VCEG) video compression standard offers double the data compression ratio at the same level of video quality, and substantially improves video quality at the same bit rate, compared to older video compression technologies.

• Smart Thermal Management 1.0

The camera has built-in temperature sensor, high-efficient turbofan, as well as high power heater. The real-time temperature detection and control algorithm make the camera work well in a wide temperature range from -50°C to 65°C (-58°F~149°F). It also supports cold start temperature above -40°C(-40°F), so it is suitable for extremely cold areas like Russia, Canada, Sweden, etc.

• Working Environment and Interoperability

Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating and Ik10 impact test. This product allows for 6KV lightning rating, which provides effective protection against lightning. Therefore, this product could work well in high concentration of salt and alkali corrosive atmosphere, such as Inland-sea countries, desert areas and so on.

The camera conforms to the ONVIF specifications and Chinese GB/T28181, ensuring interoperability between network video products regardless of manufacturer.

SPECIFICATION

Camera Module	
Image Sensor	1 / 1.8 "progressive scan CMOS
Min. Illumination	Color: 0.005 lux @F1.5, AGC ON B/W: 0.001 lux @F1.5, AGC ON 0 lux with laser
Shutter Time	50Hz: 1 / 1 s ~ 1 / 25, 000 s; 60Hz: 1 / 1 s ~ 1 / 30, 000 s
White Balance	Auto/Manual/ATW(Auto-tracking White Balance)/Indoor/Outdoor/ Fluorescent Lamp/Sodium Lamp
Gain	Auto/Manual
Day&Night	ICR cut filter
Digital Zoom	16x
Privacy Mask	24 programmable privacy masks
Focus Mode	Auto/Manual
3D DNR	Auto/Manual
BLC	Yes
HLC	Yes
WDR	120dB
Optical Defog	Yes
EIS	Yes
Regional Exposure	Yes
Regional Focus	Yes
Lens	
Focal Length	f=5.6-208mm, 37x optical zoom
Zoom Speed	Approx. 4.4s (optical lens, Wide-TELE)
Auto Iris	Yes
Field of View	Horizontal field of view: 59.8° ~ 2.0° (Wide-TELE) Vertical field of view: 33.6° ~ 1.1° (Wide-TELE) Diagonal field of view: 68.6° ~ 2.3° (Wide-TELE)
Working Distance	Wide:1.0m~INF Tele: 1.5m~INF
Aperture Range	F1.55 (Wide) to F4.5 (TELE)
PTZ	
Pan Range	360° endless
Pan Speed	Configurable, from 0.1°/s ~ 180°/s; Preset speed: 180°/s
Tilt Range	From -20° to 90° (auto-flip)
Tilt Speed	Configurable, from 0.1°/s to 150°/s; Preset speed: 150°/s
Proportional Zoom	Yes
Preset	360
Cruise	8 cruises, up to 32 presets for each cruises
Trace	4 traces, record time over 10 minutes for each trace
Power-off Memory	Yes
Action Mode	Preset/Cruise/Trace/Auto Scan/Random Scan
PTZ PositionDisplay	Yes
Preset Freezing	Yes
Scheduled Task	Preset/Cruise/Trace/Random Scan/Boundary Scanning
Smart Features	
Perimeter Protection	Intrusion, Line crossing, Region Entrance, Region Exiting, Support alarm triggering by specified target types(human and vehicle) Filtering out mistaken alarm caused by target types, such as leaf, light, animal, flag, etc.
Event Detection	Face Capturing, Region Intrusion, Line Crossing, Region Entrance, Region Exiting, Lingering Detection, Crowd Density, Fast Moving Detection, Parking Detection, Object Removal Detection, Unattended Baggage Detection, Audio Exception Detection, Motion Detection, Video Tampering Detection
Smart Tracking	Manual Tracking, Auto Tracking (support tracking specified target types such as human and vehicle), Event Tracking
Smart Record	ANR (Automatic Network Replenishment), smart search
ROI	Eight fixed region for each stream

Laser	
Laser Distance	500m
Smart IR	Yes
Network	
Max. Resolution	2560×1440
Main Stream	50Hz:25fps(2560×1440,2048×1536,1920×1080,1280×720) 50fps(2560×1440,2048×1536,1920×1080,1280×720) 60Hz:30fps(2560×1440,2048×1536,1920×1080,1280×720) 60fps(2560×1440,2048×1536,1920×1080,1280×720)
Sub Stream	50Hz:25fps(704×576,640×480,352×288) 60Hz:30fps(704×576,640×480,352×288)
Third Stream	50Hz:25fps(640×480,480×240,352×288) 60Hz:30fps(640×480,480×240,352×288)
SVC	Yes
Video Compression	H.265 / H.264 / MJPEG
Audio Compression	G.711A/U
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
System Integration	
Alarm Interface	7CH alarm input; 2CH alarm output
Audio Interface	1CH audio input, 2 to 2.4v[p-p] 1kΩ±10%; 1CH audio output (line out), impedance: 600Ω
Network Interface	1 RJ45 10M/100M Ethernet; (Hi-PoE optional)
CVBS	Optional
RS 485	Pelco-D / P protocol, custom protocols available
Storage	Built-in memory card slot, support microSD/SDHC/SDXC, up to 256G , ANR
API	ONVIF, support TVT SDK and third-party management platform
Client	VMS-90000 and the third-party client
Web Browser	IE8-11, Chrome 31.0 to 44, Firefox 30.0 to 51
General	
Power	AC24V/DC24V 5A (Max.75W, including max.18w for laser and max.12w for heater) Hi-PoE(Max.60W, including max.18w for laser and max.12w for heater)
Working Temperature	Outdoor: -50°C ~ 65°C (-58°F ~ 149°F)
Cold-Start Temperature	≥ -40°C(-40°F)
Working Humidity	≤ 90%
Protection Level	IP 67, IK 10, 6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Material	ADC12 , PC, PC+GF
Dimensions	Φ 278mm × 435mm (Φ 1094" × 17.12")
Weight(net)	Approx. 8.8KG(19.4lb)

DORI

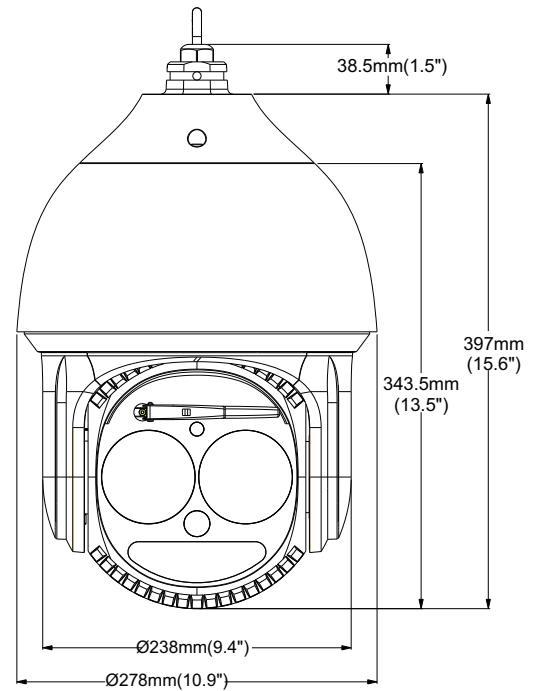
DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its filed of view. It is calculated based on sensor specification and the criteria given by EN 62676-4: 2015.

DORI	Detect	Observe	Recognize	Identify
Definition	25 px/m	63 px/m	125 px/m	250 px/m
Distance(Tele)	2786m (9140ft)	1105m(3625ft)	557m (1827ft)	278m(912ft)

ORDERING INFORMATION

Type	Model	Description
Camera	TD-8843IM (PE/WP/37M/VL50)	4MP 37x 500m Laser AI Network Speed Dome (AC24V/DC24V/Hi-PoE, Wiper)
	TD-8843IM (PE/37M/VL50)	4MP 37x 500m Laser AI Network Speed Dome (AC24V/DC24V/Hi-PoE, without wiper)
Accessories	TD-YZJ0807	Ceiling Mount
	TD-YZJ0305	Wall Mount
	TD-YZJ0305+TD-YZJ0501	Pole Mount
	TD-YZJ0305+TD-YZJ0601	Corner Mount
	Power Supply	AC24V/5A
	/	60W Hi-PoE Midspan
/	60W Hi-PoE Switch(802.3BT)	

DIMENSIONS



ACCESSORIES

Optional:



TD-YZJ0305
Wall Mount

TD-YZJ0807
Ceiling Mount

TD-YZJ0305+
TD-YZJ0601
Corner Mount

TD-YZJ0305+
TD-YZJ0501
Pole Mount



AC24V5A



60W Hi-PoE
Midspan



60W Hi-PoE
Switch

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