TD-88x3IM2N

TVT

NDAA AI PTZ

37X IR Laser 800m Network PTZ Camera

TD-8843IM2N(PE/WP/37M/VL80)
TD-8843IM2N(PE/WP/37M/VL81)
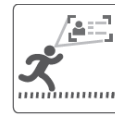TD-8883IM2N(PE/WP/37M/VL80)

4K UHD	VCA	Smart tracking	Perimeter
Max 8MP	**VCA**	**Smart tracking**	**Perimeter**
PoE++	Wiper	IP67	800m
PoE++	**Wiper**	**IP67**	**800m**

NDAA Compliant · ONVIF · RoHS CE FC

System:

The 8-inch 2nd gen PTZ family improves performance of the laser illuminator, sensor, lens, soc platform, and most important security regulation and data protection policy, which could meet the latest safety concerns and regulation. TD-8843 is the 4MP model and the TD-8883 is the 8MP model.

Function and features:

● **Top-notch image quality**

Both adopt 1/1.8″ large image format, P-IRIS and Sony 4th Starvis sensor, which could output top-notch picture quality at film cinema level.

● **Superior low-light color performance**

Improve low-light performance 4x time than last gen contributing by F1.2 large aperture and Sony Stavis technology.

●**800m Laser IR distance**

The Gen2 adopts a more powerful laser illuminator, which gives up 3x times IR beam energy, and thus could monitor above 800m in the pitch-black environment.

●Lamps smears suppress

Suppress the strong light from headlamps and streetlamps, and distinguish human face details behind the car window glass from several hundred meters away in the night.

●**Multiple Deep-learning VCA**

The built-in 1.5Tops AI engine could support multiple AI rules running at the same time: human/vehicle/no-motor classification, perimeter protection, face detection and capture, CPL, human/vehicles smart-tracking, etc.

● **Large on-board data storage**

The on-board 4GB memory could be used to load, store a database of various objects IDs, such as ANP, facial ID and barcode. This could fasten the searching, comparing process in 1 second comparing to download from back-end (NVRs).

● **ONVIF protocol, API**

This PTZ family conforms to the ONVIF, ensuring interoperability between surveillance video products regardless of manufacturers.

● **Strong protection for harsh weather**

The gen has full-metal housing, IP67 and IK10 strong protection which support long-time working harsh weather such as: windstorm, sea salty corrosion, desert and high-land with strong sun radiation. The built-in heater supports cold-boot under zero 40 degrees, and the water-wiper supports working in tropical rainy area.

● **Rich accessories**

Various mounting brackets including junction box, hi-power PoE Midspan or power adaptor support flexible in-field wiring and mounting.

Application:

Large open area surveillance projects such as rivers, forests, roads, railway, seaports, scene spots, large venues, boundary scanning and smart-tracking for criminals, wild-animal hunting, crossing border, etc. Geological disaster pre-discovery: seaquake, mudflow, forest fire, etc.

Suggestion installation: 5m-50m.

SPECIFICATION:

Camera Module	TD-8843IM2N(PE/WP/37M/VL8x), x=0,1	TD-8883IM2N(PE/WP/37M/VL80)
Image sensor	1/1.8" progressive CMOS (SONY IMX664)	1/1.8" progressive CMOS (SONY IMX678)
Max resolution	2560x1440	3840x2160
Mini. Illumination	Color：0.0005 Lux @ (F1.2,AGC ON)； B/W：0.0001 Lux @ (F1.2, AGC ON). 0Lux with IR	Color：0.001 Lux @ (F1.2,AGC ON)； B/W：0.0002 Lux @ (F1.2, AGC ON). 0Lux with IR
Image setting	Saturation, Brightness, Contrast, Sharpness, AGC, AWB, etc. adjusted by client	
Shutter Speed	VL80:50Hz：1/25s-1/25,000s, 60Hz: 1/30s-1/30,000s.　　VL81:50Hz：1/50s-1/50,000s,60Hz:1/60s-1/60,000s	
White Balance	Auto/Manual/Indoor/Outdoor	
Gain control	Auto/Manual	
SNR	≥52dB	
Day & Night control	Auto Mode, Manual Mode, Scheduled-switch, Timer.	
Focus control	Auto, Manual (Near/Far)	
Iris control	Auto/Manual	
Noise Reduction	2D/3D DNR, Auto/Manual	
AE Enhancement	BLC, HLC, HDR	
Digital Zoom	16X	
Image Stabilizer	DIS	
Optical Defog	Built-in optical defog filter	
Privacy Mask	4 areas per scene	
Picture overlay	Logo picture could be overlaid on video, 16x16,24x24,32x32,48x48,64x64,96x96,128x128pixels	
OSD overlay	Max 15 characters/line, 8 lines, white or red font color, text such as week, date, time	
Lens	**TD-8843IM2N(PE/WP/37M/VL8x),x=0,1**	**TD-8883IM2N(PE/WP/37M/VL80)**
Focus length	f= 6 ~ 222mm lens,37x optical zoom±5%	
Zoom Speed	Approx. 5.2s (optical zoom, wide-tele) ±5%	
Field of View	Horizontal:59°to 1.98°. Vertical: 34.14°to 1.12°.Diagonal: 67.08°to 2.27°. (wide-tele) ±5%	
Image distance	wide: 1.0m ~ INF; tele: 1.5m ~ INF	
Aperture type	F1.2~F4.6(wide-tele), P-IRIS, 6 slices Diaphragm, support auto/manual	
IRCut Type	Removable IR Cut filter, absorbing type to anti flare and smear by Sun and headlamps of vehicles	

D O R I	Focus length	f=6mm	f=222mm	f=6mm	f=222mm
	Detect	95.3m(312.7f.t.)	2,960m(8126.6f.t.)	138.2m(453.4f.t.)	4,293m(14,084f.t.)
	Observe	124m (129.7 f.t.)	1,429m (3250.7 f.t.)	54.8m(217.5 f.t.)	1,706m (5,589 f.t.)
	Recognize	19.06m(62.5 f.t.)	592m(1625.3f.t.)	27.6m(90.6 f.t.)	858.6m(2,817f.t.)
	Identify	7.9m (31.3 f.t.)	296m (812.7 f.t.)	13.8m(31.3 f.t.)	429.3m(1,408f.t.)

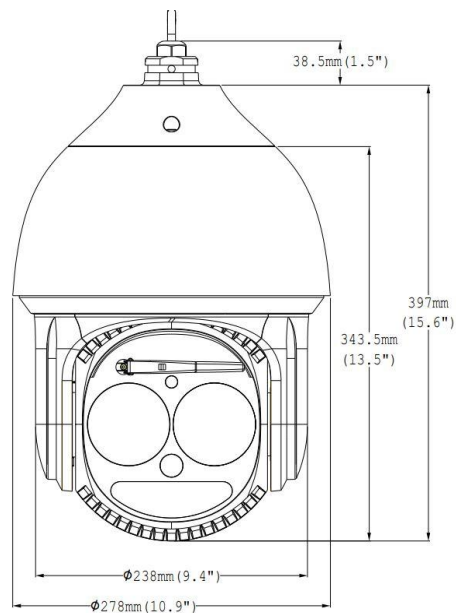| **PTZ**	
Pan Range	360°endless
Pan speed	Configurable, from 0.1~180°/s; Preset speed: 240°/s
Tilt Range	Mechanical: from -25°to 155°, auto flip at 90°
Tilt Speed	Configurable, from 0.1°~150°/s, Preset speed: 180°/s
Proportional Zoom	Yes
Preset	360
Cruise	8 cruises, up to 16 presets for each cruise
Trace	4 traces, record time over 3 minutes for each trace
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
Preset Freezing	N/A
Supplement Light	
Light distance	800m (2,625 f.t.)

Illuminator type	Zoomed IR Laser illuminator,850nm, IEC Class 4 eye safety, diagonal 70 °~2.1 °continuous variable.
Smart IR	Yes

Video	**TD-8843IM2N(PE/WP/37M/VL8x), x=0,1**	**TD-8883IM2N(PE/WP/37M/VL80)**
Mainstream	2560x1440,1920×1080,1280×960,1280×720. (VL80: 25/30fps, VL81: 25/30/50/60fps)	3840x2160,2560×1440,1920x1080,1280×960,1280×720.
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	
Video compression	Mainstream: Smart H.265+/H.265/H.264+/H.264 Sub stream: Smart H.265+/H.265/H.264/MJPEG Third stream: Smart H.265+/H.265/H.264/MJPEG	
H.264 Standard	H.264/AVC codec BP/MP/HP, Level 5.1	
H.265 Standard	H.265/HEVC codec MP, level 5.0	
Video Bit Rate	32 Kbps to 16Mbps	
Audio		
Audio compression	G.711 A/U	
Audio Bit Rate	64K bps	
Network		
Protocols	HTTP, HTTPS, IPv4/IPv6, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, DHCP, PPPoE, P2P, RTMP	
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	
API	ONVIF G/S/T/Q, support TVT SDK and third-party management platform	
Client	TVT N9000 1.4.9&TVT NVMS 2.0 and later, the third-party client, free iOS and Android App	
Web Browser	IE8-11 with plug-in; Edge, Chrome, Firefox with plugin free	
Events		
Basic event	Motion detection, video tampering alarm, alarm input, alarm output, exception ((Network disconnected, IP address conflict, SD full, SD error)	
Smart event	Line crossing detection, region entrance detection, object removal detection, intrusion detection, region exiting detection, audio exception detection	
Smart tracking	Manual/Auto-tracking of human/no-motor vehicle/motorized vehicle(ver5.1.1)	
Alarm Linkage	Alarm actions, such as Preset, Cruise, Trace, Memory Card Video Record, Trigger Recording, Notify Surveillance Center, Upload to FTP/Memory Card, Send Email, etc.	
Deep-learning Function		
Face capture	Detecting multiple faces in the same scene. Support detecting, capturing, grading, and output the best.	
Fac comparison	(Default off) Yes	
Perimeter protection	Line crossing, Intrusion, Region entrance, Region exiting. Support alarm triggering by specified type.	
Road-traffic and vehicle detection		
Road traffic	Support vehicle detection and tracking(ver5.1.1)	
System Integration		
Alarm Interface	7CH alarm input (Dry contact); 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 Adaptive Ethernet	
SD Card Slot	One MicroSD slot and chamber, up to 256G	
Built-in Speaker	N/A	
RS485	Half-duplex, Pelco-P/D	
BNC	N/A	
Reset button	Yes	
Electric Fan &Heater	Built-in electric fan for heat sink and glass Frost/Fog removal. Built-in electric heater for cold start.	
Water removal	Electric wipe for water-drops, dust, mud, ice, frost. Time-schedule/manual.	
Demist	Active electric heating and air loop	
General		
Languages	Czech; English, German; Hungarian; Italian; Japanese; Korean; Portuguese, Polish; Russian, Romanian, Spanish; Spanish (Mexico); Simplified Chinese; Turkish; Traditional Chinese. Etc.	
Power consumption	avg:36W, max 63.6Watt (PTZ working + IR ON + Heater on)	

Power adaptor	DC36V3000mA, CE/FC/UL, 0-40℃
	AC24V5000mA, CE/FC/UL,-40℃,+70℃
	90W PoE++ Midspan, FCC/UL/GB,-10,+50℃
Work condition	-40 ℃~70℃(-48°F ~ 158°F) IR off; -40℃~50℃, IR on; Cold start>=- 30℃(0.5~1.5 hour waiting); 90%RH
Storage condition	-20℃~70℃; ≤ 80% RH
Material	Aluminum Alloy (ADC12)
Dim. &Weight	₵ 278mm x H 435.5mm(₵ 10.9'x 17.1'), Net weight approx. 8.8 Kg (19.4 lb.)
Approval	
EMC	FCC SDoC (47 CFR Part 15, Subpart B).
	CE-EMC (EN 55032: 2015, EN 61000-3-2: 2019, EN 61000-3-3: 2013, EN 50130-4: 2011+A1: 2014).
	KC (KN 32:2015, KN 35: 2015)
Certification	CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, IEC 62368-1:2014).
	CE-LVD (EN 62368-1:2014+A11:2017),
	BIS (IS 13252(Part 1):2010+A1:2013+A2:2015);
Environment	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)
Protection	IP67(IEC 60529-2013), IK10 (IEC 62262:2002),6000V Lightning Protection, Surge Protection and Voltage Transient Protection

Available model:

TD-8843IM2N(PE/WP/37M/VL80)	4MP 37X 800m laser AI 8-In Turret PTZ Camera with wiper,include power adaptor and bracket(Not recommend for new project)
TD-8843IM2N(PE/WP/37M/VL81)	50/60fps 4MP 37X 800m laser AI 8-In Turret PTZ Camera with electric wiper, include DC power adaptor and bracket
TD-8883IM2N(PE/WP/37M/VL80)	8MP 37X 800m laser AI 8-In Turret PTZ Camera with electric wiper, include power adaptor and bracket

Dimensions(mm/inch):

Accessories:

TD-YZJ0308
Wall mounting bracket

TD-YZJ0309
Pole mounting bracket

TD-YZJ0310
Corner Mounting bracket

TD-YZJ0807
Pendant mounting bracket

TD-YZJ0311
Wall mounting bracket
With junction box

TD-YZJ0312
Pole mounting bracket
with junction box

TD-YZJ0313
Corner mounting bracket
with junction box

TD-K23
PTZ control keyboard

AC24V/5A Power adaptor

DC36V/3A Power adaptor

90W PoE++ MidSpan

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