

50X IR 500m Network PTZ Camera



TD-8843IM2N(PE/ WP/50M/ AR50)

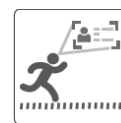
TD-8883IM2N(PE/ WP/50M/ AR50)



Max 8MP



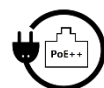
VCA



Smart tracking



Perimeter



PoE++



Wiper



IP67



500m



System:

The 2nd generation of 8inch metal PTZ, TD-88x3IM2N(PE/50M/WP/AR50) mainly improves hardware performance and security regulation, data protection policy, which confirms to GDPR, NDAA and other specification.

Function and features:

- **Top-notch image quality and low light performance**

Sony 4th Gen Starvis sensor and super powerful 50x zoom lens can output the top-notch picture quality and vivid colorful image under low-night conditions.

- **Diaphragm P-IRIS**

They both adopt a 10 slices P-IRIS diaphragm which could accurately control the amount and angle of light into the sensor, greatly improve image contrast and quality.

- **Thin film Stacked IR contributes 3x brightness.**

Comparing to Gen1, the new PTZ cameras mix 5W stack thin film IR LED chip and 6W high-power VCSEL LED chip, which could give up 3x illuminator energy. Thus they could reach up to 500m in the pitch-black environment.

- **Multiple VCA functions**

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 pictures ID (Cargo S/N, facial ID, CPL ID, etc.).

- **ONVIF protocol, API**

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

- **Strong protection for harsh weather**

Metal housing, IP67 water immerse and IK10 vandalism resistant. Built-in high power electric heater could support work under northern cold area. Built-in electric water-wiper supports working in tropical rainy area. These products were suited for long-time working in harsh weather, such as windstorm, sea salty corrosion, desert and high-land strong sun radiation.

- **Rich accessories**

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

Application:

Large open areas such as rivers, forests, roads, railway, seaports, scene spots, large venues perimeter protection. Boundary scanning and smart-tracking for criminals, illegal 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/50M/AR50)		TD-8883IM2N(PE/WP/50M/AR50)	
Image sensor		1/1.8" progressive CMOS (SONY IMX664)		1/1.8" progressive CMOS (SONY IMX678)	
Max resolution		2560×1440		3840×2160	
Mini. Illumination		Color: 0.00065 Lux @ (F1.4, AGC ON) B/W: 0.00013 Lux @ (F1.4, AGC ON) 0 Lux with IR		Color: 0.0013 Lux @ (F1.4, AGC ON) B/W: 0.00026 Lux @ (F1.4, AGC ON) 0 Lux with IR	
Image setting		Saturation, Brightness, Contrast, Sharpness, AGC, AWB, etc. adjusted by client			
Shutter Speed		50Hz:1/25s-1/25,000s, 60Hz:1/30s-1/30,000s			
White Balance		Auto/Manual/Indoor/Outdoor			
Gain control		Auto/Manual			
SNR		≥52dB			
Day & Night control		Auto Mode, Manual Mode, Scheduled-switch, Timer.			
Iris control		Auto/Manual			
Noise Reduction		2D/3D DNR, Auto/Manual			
AE Enhancement		BLC, HLC, HDR			
Digital Zoom		16X			
Electronical Stabilizer		N/A			
Optical Defog		N/A			
Privacy Mask		4 areas per scene(ver5.1.)			
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/50M/AR50)		TD-8883IM2N(PE/WP/50M/AR50)	
Focus length		f= 5.3 ~ 265mm lens,50x optical zoom ±5%			
Zoom Speed		Approx. 7s (optical zoom, wide-tele) ±5%			
Field of View		Horizontal:65.3 °to 1.7 °; Vertical: 38.6 °to 1 °; Diagonal: 72.9 °to 2 °(wide-tele) ±5%			
Image distance		wide: 0.1m ~ INF; tele: 2m ~ INF			
Aperture type		F1.4~F4.2(wide-tele), P-IRIS, 10 slices, IRIS Diaphragm, support manual /auto			
Optical filter type		Removable IRCUT filter (Reflection type)			
DORI	Focus length	f=5.3mm	f=265mm	f=5.3mm	f=265mm
	Detect	78.6m (258 f.t.)	3,270m (10,728 f.t.)	114m (374 f.t.)	4,742m (15,558 f.t.)
	Observe	31.2m (102 f.t.)	1,298m (4,259 f.t.)	45.2m(148 f.t.)	1,706m (5,597 f.t.)
	Recognize	15.8 m (52 f.t.)	654m (2,146 f.t.)	22.8m(71 f.t.)	948.4m(3,112 f.t.)
	Identify	7.9m (26 f.t.)	327m (1,073 f.t.)	11.4m(37 f.t.)	474.2m(1,556 f.t.)
PTZ					
Pan Range		360 °endless			
Pan speed		Configurable, from 0.1~180 °s; Preset speed: 180 °s			
Tilt Range		Mechanical from -20 °to 180 °; auto flip at 90 °			
Tilt Speed		Configurable, from 0.1 °~150 °s, Preset speed: 150 °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					
IR distance		500m (1,640 f.t.)			
Illuminator type		12pcs of IR LED and IR VCSEL into 6 groups(65 °35 °18 °9 °5 °3 °)			
Smart IR		Yes. Support facial priority and ANPR priority			
Video		TD-8843IM2N(PE/WP/50M/AR50)		TD-8883IM2N(PE/WP/50M/AR50)	

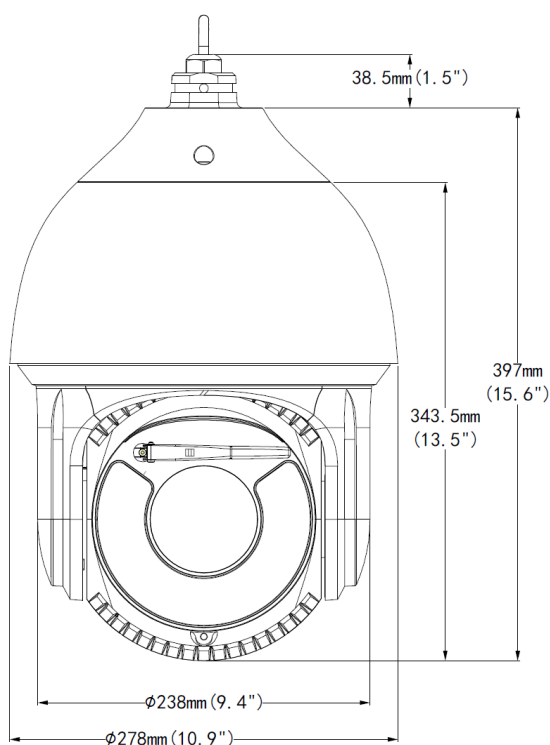
Mainstream	50Hz/25fps: 2560×1440, 1920×1080, 1280×960, 280×720 60Hz/30fps: 2560×1440, 1920×1080, 1280×960, 280×720	50Hz/25fps:3840×2160, 2560×1440, 1920×1080, 1280×960, 1280×720 60Hz/30fps: 3840×2160, 2560×1440, 1920×1080, 1280×960, 1280×720
Sub stream	50Hz/25fps:704 × 576, 640 × 480, 352 × 288; 60Hz/30fps:704× 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	smart H.265+/H.265/H.264+/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/Q/T, 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	
Event		
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. Filtering leaf, trees, animals, flags.	
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 (people/vehicle classification)	
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. auto/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.	
Power consumption	Avg :37W, Max. 51 W: IR max 28 W, Heater max 10W	
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 ℉ ~ 158 ℉) IR off: -40 ℃~50 ℃, IR on: Cold start>= - 40 ℃ (0.5~1.5 hour waiting); 90%RH	

Storage condition	-30°C ~60°C; ≤ 95% RH
Material	Aluminum Alloy (ADC12)
Dim. &Weight	Φ 278mm x H443.5mm(Φ 10.9"x 17.1"), Net weight approx. 9.4 Kg (20.7 lb.)
Approval	
EMC	FCC SDoC (47 CFR Part 15, Subpart B); KC (KN 32:2015, KN 35: 2015); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2019, EN 61000-3-3: 2013, EN 50130-4: 2011+A1: 2014);
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/50M/AR50)	4MP 50X 500m IR PoE++ AI 8-In Turret PTZ Camera,with electric wiper, including power adaptor and wall mounting bracket
TD-8883IM2N(PE/WP/50M/AR50)	8MP 50X 500m IR PoE++ AI 8-In Turret PTZ Camera, with electric wiper, including power adaptor and wall mounting 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.

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