

4" 2MP 20x Network IR Speed Dome



TD-8423IS (PE/20M/AR15)

- 1/2.8" 2MP progressive scan CMOS
- Up to 1920 x 1080@30fps resolution
- Min. illumination:
Color: 0.005 Lux@(F1.6, AGC ON)
B/W: 0.001 Lux@(F1.6, AGC ON)
0 Lux with IR
- 20× optical zoom, 16x digital zoom
- WDR, HLC, BLC, 3D DNR, Defog
- Up to 150m smart IR distance
- PoE (802.3 at class 4)
- Support H.265+/H.265 video compression



H.265



PoE



IP 66



Smart IR



WDR



Starvis



System Overview

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, the camera provides a wide monitoring range and great detail. The camera delivers 2MP full high definition resolution at 25/30fps. The camera is equipped with smooth control, high quality image, and good protection, meeting compact size demands of video surveillance applications.

Features

- **High Efficiency Video Coding (H.265)**

The H.265 (ITU-T VCEG) video compression standard offers double the data compression ratio at the same level of video quality, and substantially improved video quality at the same bit rate, compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and different coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

- **Smart IR (2.0)**

The product updates its IR lighting sub-system to Smart IR 2.0. The Infrared illumination lens adopts new freedom surface design pattern, and improves the uniformity of illumination above 0.5, compared to 0.3 of the older TIR fashion. And the new hardware is able to accurately adjust the IR LED driving current, step by step. Mixing the auto-exposure algorithm and IR LED control algorithm together makes the IR brightness control self-adaptive and no more over-exposed for most conditions.

- **Smart TM 1.0 (Thermal Management)**

The camera has built-in temperature sensor, high-efficient turbofan, as well as high power heater. The system uses PID control algorithm to adjust the turbofan's speed and heater's power to make the camera working in a suitable temperature chamber.

- **Superior Image Quality**

The product adopts high MTF 20x zoom lens and Sony latest STARVIS image sensor so that it can capture vivid color image at low light conditions, avoid Smear for very bright objects, such as street road lamp, car's bright lamp, and output high-quality image. Besides, when WDR is selected, the camera will combine long exposure frame and short exposure frame into one frame-the so called physical WDR (true WDR).

- **Working Environment and Interoperability**

This product is rated for use in temperatures from -30 °C to +55 °C, under 90% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP66 Ingress Protection rating, makes it work well outdoor. The special design eyebrow upon the lens window, which could reduce the lens temperature and avoid the image flare when the sun direct glare the camera lens. This product allows for 4KV lightning rating, which provides effective protection against lightning.

The camera conforms to the ONVIF specifications, ensuring interoperability between network video products regardless of manufacturer.

SPECIFICATION

Camera Module	
Image Sensor	1 / 2.8 "progressive scan CMOS
Min. Illumination	Color: 0.005 lux @F1.6, AGC ON B/W: 0.001lux @F1.6, AGC ON 0 lux with IR
White Balance	Auto/Manual/ATW (Auto-tracking WB)/Indoor/Outdoor/Fluorescent Lamp/Sodium Lamp
S/N ratio	More than 50dB
Gain	Auto/Manual
Shutter Time	50Hz: 1 / 1 s ~ 1 / 25, 000 s; 60Hz: 1 / 1 s ~ 1 / 30, 000 s
Day&Night	IR Cut Filter
Privacy Mask	4 programmable privacy masks
Focus Mode	Auto/Manual
WDR	True WDR, 2 frames in one
Lens	
Focal Length	5.5-110mm, 20x optical zoom
Zoom Speed	Approx. 3.5s (optical lens, Wide-TELE)
Field of View	Horizontal field of view: 52.01° to 1.78° (Wide-TELE) Vertical field of view: 29.30° to 3.15° (Wide-TELE) Diagonal field of view: 59.79° to 3.62° (Wide-TELE)
Working Distance	Wide: 1.0m~INF Tele: 1.5m~INF
Aperture Range	F1.6 (Wide) to F3.5 (TELE)
IR	
IR Distance	150m
Smart IR	Support
PTZ	
Pan Range	360° endless
Pan Speed	Configurable, from 0.5°/s to 80°/s; Preset speed: 80°/s
Tilt Range	From -5° to 90° (auto-flip)
Tilt Speed	Configurable, from 0.5°/s to 80°/s; Preset speed: 80°/s
Proportional Zoom	Support
Preset	360
Cruise	8 cruises, up to 16 presets for each cruises
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
Scheduled Task	Preset/Cruise/Trace/Random Scan/Boundary Scanning/Dome Reboot
Compression Standard	
Video Compression	H.265 / H.264 / MJPEG
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main Profile
Video Bit Rate	128Kbps ~ 6Mbps
SVC	Support
Smart Features	
Basic Event	Motion Detection, Video Tampering Detection, Exception
Smart Event	Object Removal Detection, Intrusion Detection, Line Crossing Detection, People Intrusion and People Counting
Smart Record	ANR (Automatic Network Replenishment)
Image	
Max. Resolution	1920×1080
Main Stream	50Hz:25fps(1920×1080, 1280×720) 60Hz:30fps(1920×1080, 1280×720)

Sub Stream	50Hz:25fps(1280×720, D1, CIF) 60Hz:30fps(1280×720, D1, CIF)
Third Stream	50Hz:25fps(D1, 480×240, CIF) 60Hz:30fps(D1, 480×240, CIF)
Image Enhancement	WDR/HLC/BLC/3D DNR/Defog/ Regional Exposure/Regional Focus
Network	
Network Storage	Built-in micro SD card slot, up to 128GB
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
API	ONVIF, support TVT API and third-party management platform
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
Client	VMS-9000 Client
Web Browser	IE8-11, Chrome 31.0 to 44, Firefox 30.0 to 51
Interface	
Network Interface	1 RJ45 10M/100M Ethernet, PoE (802.3at, class4)
General	
Power	12VDC, 2.0A and PoE (802.3at, class 4); 42.5 to 57 VDC, 0.6A, Class4 Max. 18W, including max. 7W for IR
Working Environment	-30°C~55°C(-22°F~131°F), ≤ 90% RH
Protection Level	IP 66 Standard, 4000V Lightning Protection, Surge Protection and Voltage Transient Protection
Material	ADC12, PC, PC+10%GF
Dimensions	Φ 173mm × 247mm (Φ6.8" × 9.7")
Weight	Approx. 2.1KG (4.63lb)

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.

DORI	Detect	Observe	Recognize	Identify
Definition	25 px/m	63 px/m	125 px/m	250 px/m
Distance(Tele)	1600m (5240ft)	635m(2083ft)	320m (1050ft)	160m(525ft)

ORDERING INFORMATION

Type	Model	Description
2MP PTZ Camera	TD-8423IS (PE/20M/AR15)	2MP 20x IR Network Speed Dome, 12V&PoE
Accessories	TD-YZJ0807	Ceiling Mount
	TD-YZJ0808	Wall Mount
	TD-YZJ0501	Pole Mount
	TD-YZJ0601	Corner Mount
	LAS30-57CN-RJ45	30W Hi-power PoE Midspan
	ONV-POE31004PL-at	30W Hi-power PoE Switch 4+1
	TD-K11-W	Network Keyboard
	TD-K22	Network Keyboard (Color Screen)

Orange color function--coming soon

ACCESSORIES

Optional:



TD-YZJ0808
Wall Mount



TD-YZJ0807
Ceiling Mount



TD-YZJ0701
In-Ceiling Mount



TD-YZJ0501
Pole Mount



TD-YZJ0601
Corner Mount



TD-K11-W
Network Keyboard



TD-K22
Network Keyboard
(Color Keyboard)



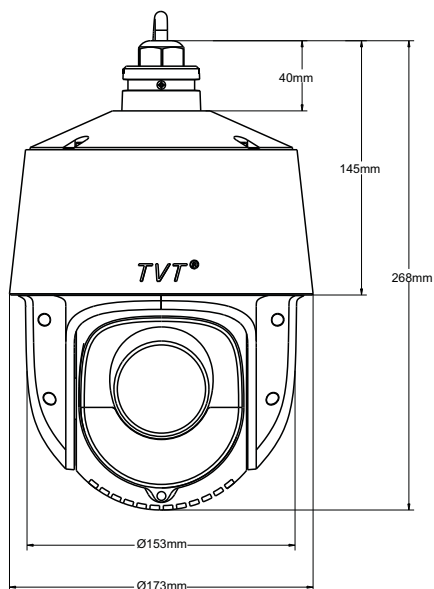
LAS-57CN-RJ45
30W Hi-Power
PoE Midspan



ONY-PoE31004PL
30W Hi-Power PoE
Switch

TD-YZJ0807 Ceiling Mount	TD-YZJ0808 Wall Mount	TD-YZJ0808+TD-YZJ0501 Pole Mount	TD-YZJ0808+TD-YZJ0601 Corner Mount	YZJ0701E In-Ceiling Mount

DIMENSIONS



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