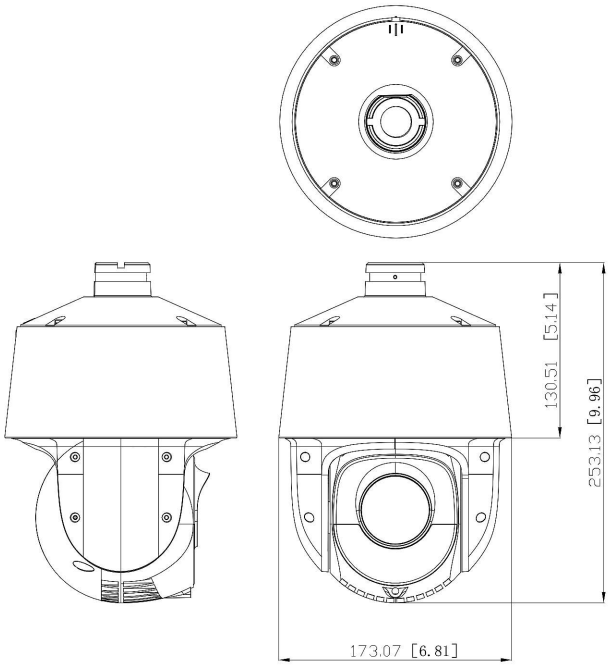
IP Power 8MP(4K) 24x Zoom AI PTZ Camera





NDAA Compliant • Smart Tracking of Human / Vehicle • Intelligent Video content analytics • 4.8~120mm Motorized Lens • 25× Optical Zoom • Smart IR 490ft (150m) • PoE+ or 12VDC • IP66

Overview

The PTZ camera features a SONY latest 4K images sensor, and a 25x optical zoom lens, delivering 3840×2160@30fps image details over wide areas. The H.265 video compression reduces bit rate by 50% compared to H.264 without loss. Its 1.5Tops AI engine can detect and classify up to 15 objects per scene, triggering alerts when objects intrude restricted areas. The camera will trace, zoom, snap, record, and trigger alerts. Enhanced IR brightness extends night vision beyond 150m. The PTZ camera conforms to ONVIF specifications and complies with NDAA 2019. It features durable body material, a built-in turbo fan and heater for 24/7 outdoor operation, and added alarm and audio interfaces. With excellent picture quality and robust protection, it is ideal for small surveillance applications.

FEATURES

- 1/2.8″ SONY progressive scan CMOS
- Up to 3840x2160 resolution
- Mini illumination: Color: 0.01 lux @ (F1.65 AGC ON) 0 Lux with IR
- 25x optical zoom, Accurate and fast focusing
- WDR, 3D DNR, Smart IR 150m
- Smart H.265+/H.265/H.264+/H.264
- Intelligent Video content analytics
- Smart tracking of human/vehicle
- Smart detection and perimeter protection
- ONVIF, API and SDK
- PoE+ and DC12V
- IP66
- -40°C~60°C, ADC12 & PC/GF

SPECIFICATIONS

Camera Module	
Image sensor	1 / 2.8″ SONY latest progressive scan CMOS
Mini. Illumination	Color：0.01Lux @ (F1.65，AGC ON)；B / W：0.002Lux @(F1.65，AGC ON);0Lux with IR
Image setting	Flip, Mirror, Saturation, Brightness, Contrast, Sharpness, AGC, etc. adjusted by client
Shutter Speed	1 / 1 s – 1 / 100,000 s
White Balance	Auto / Manual / Indoor / Outdoor
Gain control	Auto / Manual
Day & Night control	Auto / Manual, Time schedule
Iris control	Auto / Manual
SNR	≥55dB
3D DNR	Auto / Manual
AE Enhancement	BLC, HLC, WDR
Privacy Mask	24 areas, up to 8 mask in the same frame
Picture overlay	Logo picture could be overlaid on video with 128 × 128pixels,24bits BMP format
OSD overlay	max 15 characters / line, 8 lines, white or red font color

Lens	
Focus length	f=4.8 ~ 120mm lens, 25x optical zoom
Zoom Speed	Approx. 3.6s (optical zoom, wide-tele)
Field of View	Horizontal: 55° ~ 2.4° Vertical: 33° ~ 1.4° Diagonal: 61.5° ~ 2.8° (wide-tele)
Working distance	wide: 1.0m ~ INF; tele: 1.5m ~ INF
Iris type	DC-IRIS(Hall sensor, 16 Stops), F1.65 ~ F3.8 (wide-tele)
IRCut type	Removable IR CUT filter
DORI distance	
Detect	2722m (8930 ft)
Observe	1080m (3543 ft.)
Recognize	540m (1772 ft)
Identify	270m (886 ft)
PTZ	
Pan Range	360°endless
Pan speed	Configurable, from 0.1 ~ 200° / s; Preset speed: 240° / s
Tilt Range	From -5° to 90°,auto flip
Tilt Speed	Configurable, from 0.1° ~ 200° / s, Preset speed: 240° / s
Proportional Zoom	Yes
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
Schedule Task	Preset / Cruise / Trace / Random Scan / Boundary Scanning / Dome reboot
IR	
IR Distance	150m (492 f.t.)

Smart IR	Yes
Network	
Max Resolution	3840 × 2160
Main stream	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	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	64 Kbps to 16Mbps
Audio compression	G.711 A / U
Audio Bit Rate	64K bps
Protocols	HTTP, HTTPS, IPv4 / IPv6, 802.1x, QoS, FTP, SMTP, UPnP, SNMP,DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP / IP, UDP, DHCP, PPPoE
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)
Face recognize	Detecting max 15 faces at same scene. Detecting, tracking, capturing
Road traffic	Vehicle detecting and tracking
Smart Detection	Tripwire, Bi-directional tripwire, Illegal intrusion detection, Region entrance detection, Region exitance detection, Unattended baggage detection, Object removal detection, etc.
Smart Tracking	Smart tracking of human or vehicle, auto / manual
System Integration	
Alarm Interface	1 Alarm input(Dry contact); 1 Alarm output

Audio Interface	1 audio input(MIC in); 1 audio output, line level, 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+
SD Card Slot	One MicroSD slot, up to 256G
RS 485	N / A
BNC	N / A
Speaker	N / A
Reset button	Yes
Heater	Yes
Fan	Yes
Water removal	Remove water-drops by quick spinning
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	IE8 ~ 11
General	
Culture	16 languages: Czech; English, German ; Hungarian ; Italian ; Japanese ; Korean ; Portuguese, Polish; Russian, Romanian, Spanish; Spanish(Mexico);Simplified Chinese; Turkish; Traditional Chinese.
Power Supply	DC 12V±25%,3000mA PoE+ (802.3.at, class 3) max 24W include IR ON+PTZ working
Working condition	−40°C ~ 60°C (−40°F ~ 140°F), Cold start at - 30°C; 90%RH
Storage condition	−40°C ~ 70°C ; ≤ 95% RH
Protection	IP66, 4000V Lightning Protection, Surge Protection and Voltage Transient Protection
Material	Aluminum Alloy + Plastic / GF15%
Dimensions	Φ 173mm × 247mm (6.8 inch Φ × 9.7 inch)
Weight	Approx. 2.1 Kg (4.63 lb.)
Certification	IP66, IK(excluding glass window), ROHS, CE, FC