25X 4MP IR Network Smart PTZ

2K UHD	H.265		
4MP	H.265	VCA	Smart tracking
Perimeter	PoE+	IP66	150m

NDAA Compliant · ONVIF · RoHS CE FC
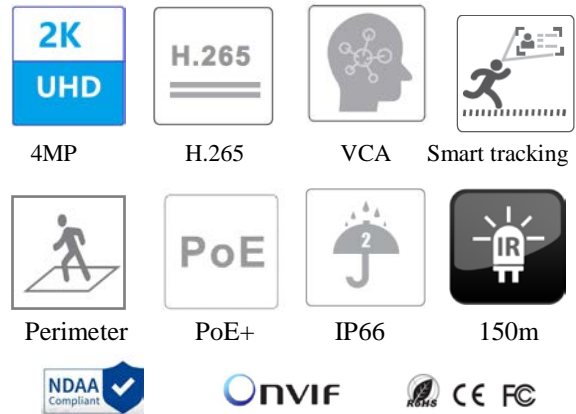
System

    IPC4-SP25XN   PTZ camera which adopts 5MP BSI+NIR images sensor, with high quality 25x optical zoom lens, could deliver top-notch 2560x1440@30fps image details over a wide open area. The H.265 video compression reduces bit rate down to 50% of H.264 without loss. With its built-in 1.5Tops AI engine, the PTZ camera could detect and classify max 15 objects per scene. When any of them intrude restricted area, the PTZ camera will trace, zoom fit in center of screen, snap and record and trigger alert. The gimbal rotation speed is improved for tracing fast object. The IR brightness is enhanced 200%, which improves night vision distance above 150m. This PTZ conforms to the ONVIF specifications ensuring interoperability between network video products regardless of manufacturers, and also complies with NDAA 2019.   IPC4-SP25XN series PTZ has enhanced body material, built-in turbo fan and heater and is designed for 7/24H work in outdoor weather. This series has also added alarm and audio interface, etc. With excellent picture quality and good protection, the camera could meet the demand of small size of surveillance application.

Key Spec:

- BSI+NIR progressive scan CMOS
- Up to 2560x1440 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

Application:

    Wide range area intrusion, perimeter protection and alarm, such as parks, scenic spots, stations and venues, industrial park.

SPECIFICATION:

Camera Module	
Image sensor	1/2.7"BSI+NIR progressive scan CMOS
Pixel size	2.0um
Effective Pixels	2884(H)x1624(V)
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	50Hz: 1/25s ~1/25,000s; 60Hz: 1/30s ~ 1/30,000s
White Balance	Auto/Manual/Indoor/Outdoor
Gain control	Auto/Manual
Day & Night control	Auto/Manual ,time schedule
Iris control	Auto/Manual
SNR	≥52dB
3D DNR	Auto/Manual
AE Enhancement	BLC, HLC, WDR
Privacy Mask	4 areas, up to 4 mask in the same frame
Picture overlay	Logo picture could be overlaid on video with 128x128pixels,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°±5%; Vertical: 33° ~ 1.4°±5%; Diagonal: 61.5° ~ 2.8°±5% (wide-tele)			
Working distance	Wide: 1.0m ~ INF; tele: 1.5m ~ INF			
Aperture Range	F1.65 ~ F3.8 (wide-tele)			
Iris type	Auto DC-IRIS, 16 Stops			
IRCut type	Removable IRCut filter			
DORI distance	Detect(25px/m)	Observe(63px/m)	Recognize(125px/m)	Identify(250px/m)
	2400m(7874 f.t.)	952m(3124 f.t.)	480m(1772 f.t.)	240m(787 f.t.)

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	160m(525 f.t.)
Smart IR	Yes

Network	
Max Resolution	2560x1440 (16:9 aspect ratio,
Main stream	50Hz: 25fps: 2560×1440,1920×1080,1280×960,1280×720; 60Hz: 30fps: 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.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	64Kbps to 8Mbps
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
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
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 exiting 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, Trace, Memory Card Video Record, Trigger Recording, Upload to FTP/Memory Card, Send Email, etc.
Network Interface	1 RJ45 10M/100M Adaptive Ethernet ,Support PoE+(802.3.at,class 6)
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	DC12V±25%,3000mA ,PoE+ (802.3.at, class 3), max 23W include IR ON+PTZ working
Working condition	-40°C ~ 60°C (-40°F ~ 140°F), Cold start at - 30°C(30minutes waiting); 90%RH
Storage condition	-40°C ~ 70°C ; ≤ 95% RH
Protection	IP66, 6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Material	Aluminum Alloy + Plastic/GF15%
Dimensions	Φ 173mm × 268mm (Φ6.8 inch × 10.5 inch)
Weight	Approx. 2.1 Kg (4.63 lb.)
Certification	IP66,IK10(excluding glass window),ROHS,CE,FC

Dimensions:

40mm

145mm

268mm

Ø153mm

Ø173mm