# AI PTZ

# 4MP 40X IR Network Speed PTZ Cameraiii

### System:

IPC4-SP40X, the 3rd generation of AI PTZ camera which adopts a powerful 40x optical zoom lens, and latest sensor, could deliver 2560x1440@30fps image details over a large open area. The PTZ has a high AI computing engine which can detect max 17 objects per scene and classify human/vehicles within 720m distance. When any of them intrude restricted area, the camera will trace, zoom fit in center of screen, snap and record and trigger alert until object disappeared. Comparing to last Gen, we has revised its gimbal system and improved rotation speed and tilt range for this PTZ camera, applying to longer and faster smart-tracking. It could bring up vivid color image in most areas. Even in the pitch black environment, it could capture human behaviors up to 350m, at a court evidence level. The PTZ has H.265 video compression which reduces bit rate down to 50% of H.264 without loss. And it conforms to the ONVIF, ensuring interoperability between surveillance video products regardless of manufacturers. The PTZ confirms to most security regulation and data protection policy. With excellent picture quality and strong protection, the camera could meet the demand of 7x24Hour working in harsh weather.

### Key Spec:

- Ultra fast rotation and tracking speed, dual belts for longer life.
- Excellent low light performance
- Super long IR supplement light distance
- Deep-learning engine, support human/vehicles detection, auto-tracking
- IP66/IK10/6KV Strong protection,7x24 Hours outdoor harsh weather
- Stable supply-chain, long product life circle
- Confirms to data protection regulations of major countries.

### **Application:**

Large range area intrusion, perimeter protection and alarm and smart-tracking: such as airport, express way, parks, scenic spots, stations and venues, industrial park.

Geological disaster pre-discovery: seaquake, mudflow, forest fire.

Suggestion installation: at 10-20m in height

## **SPECIFICATION:**

Camera Module						
Image sensor	1/2.8" progressive scan CMOS image sensor, with BSI and NIR++, Dual Gain					
Max resolution	2560x1440					
Mini. Illumination	Color: 0.005 Lux @ (F1.2, AGC ON); B/W: 0.001 Lux @(F1.2, AGC ON);0Lux with IR					
Image setting	Flip, Mirror, Saturation, Brightness, Contrast, Sharpness, AGC, etc. adjusted by client					
Shutter Speed	60Hz: 1/30s – 1/30,000s@30fps;50Hz:1/25s~1/25,000s@25fps					
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, DWDR					
Digital Zoom	16X					
Electronical Stabilizer	N/A for this version					
Privacy Mask	4 areas, up to 8 mask per request.					
Picture overlay	Logo picture could be overlaid on video with 128x128pixels,24bits format					
OSD overlay	Max 15 characters/line, 8 lines, white or red font color					
Lens						
Focus length	f=4.5-180mm lens,40x optical zoom					
Zoom Speed	Approx. 5.2s (optical zoom, wide-tele)					
Field of View	H: 59.1 °~1.8 °, V: 38.4 °~ 1.1 °; D: 68.9 °~ 2.1 °(wide-tele) ±5%					
Image distance	Wide: $1.0m \sim INF$ ; tele: $1.5m \sim INF$					
Aperture Range	Max F1.2					
Iris Type	DC IRIS					
IRCut type	Removable IRCut f	ilter				
DORI distance	Focus length	Detect	Observe	Recognize	Identify	
	f=4.5mm	99.6m(326.8 f.t.)	39.5m(129.7 f.t.)	19.9m(65.4 f.t.)	10m(32.7 f.t.)	
	f=180mm	3600m(8126.6f.t.)	1429m(3250.7 f.t.)	720m(1625.3f.t.)	360m(812.7 f.t.)	
PTZ						
Pan Range	360 endless					
Pan speed	Configurable, from	0.1~390 %s: Preset speed:	420 %s			
Tilt Range	Configurable, from 0.1~390 %; Preset speed: 420 %         From -25 °to 155 °auto flip at 90 °					
Tilt Speed	Configurable, from 0.1 °~270 %, Preset speed: 300 %					
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/ De-frost/Water Removal					
IR			section record by			
IR Distance	350m (1148 f.t.) ,85	i0nm IR				
Smart IR	Yes					
Network	100					
Main stream	50Hz: 25fpg: 2560y	1//0 1020 ×1080 1280 ×04	50 1280 v720. 60Uz. 20fma	2560x1440,1920×1080,1280	×960 1280 ×720	
Infant Sucan	50112. 251ps. 2500X	576, 640 ×480, 352 ×288	0,1200×120, 00HZ. 50IPS:		~700,1200 ~720	

	50Hz:25fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288)			
Third Stream	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, P2P			
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 acc control; IP address filtering			
API	ONVIF A/G/Q/S/T, support TVT SDK and third-party management platform			
Client	TVT N9000 1.4.7, TVT NVMS 2.0; and the third-party client, free iOS and Android App			
Web Browser	IE8-11 with plug-in; Edge, Chrome, Firefox with plugin free			
Smart Features	120-11 with plug-in, Luge, Chronic, I nerox with plugin nee			
	Motion detection, Video tampering alarm, Exception(Network disconnected, IP address conflict, SD full, SD error)			
Basic event				
Face recognize	Face detection & capturing, Max 17 faces per scene.			
Road traffic	Vehicle detecting and tracking			
Smart Detection	Tripwire, Bi-directional tripwire, Illegal intrusion detection, Region entrance detection, Region exiting detection, etc. More VC. per request.			
Smart Tracking	support smart tracking of human or vehicle, manual/auto			
System Integration				
Alarm Interface	1 Alarm input(Dry contact); 1 Alarm output			
Audio Interface	1 audio input, line level, 2.0-2.4Vpp, impedance 1K $\Omega$ ; 1 audio output, line level, impedance, 600 $\Omega$			
Alarm Linkage	Alarm actions, such as Preset, Cruise, Trace, Memory Card Video Record, Trigger Recording, Notify Surveillance Center, Uplo to FTP/Memory Card, Send Email, etc.			
Network Interface	1 RJ45 10M/100M Adaptive Ethernet			
SD Card Slot	One MicroSD slot and chamber, up to 256G			
Built-in Speaker & Mic	N/A			
RS485	N/A N/A			
BNC	N/A			
Reset button	Yes			
Electric Heater &Fan	Yes			
Water removal	Remove water-drops by quick spinning(5.1.2 and later)			
Frost and fog removal	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 supply	DC24V±25%, PoE+ (802.3.at,type 2), max 23.5W include IR ON+PTZ working			
Working condition	-40 ℃~70 ℃ (-40 F ~ 158 F), IR off; -40 ℃~50 ℃,IR on; Cold start>=- 30 ℃(0.5-1hour waiting); 90%RH			
Storage condition	-40 ℃ ~ 70°C ; ≤ 95% RH			
Protection	6000V Lightning Protection, Surge Protection and Voltage Transient Protection			
Material	Aluminum Alloy (ADC12); Polymer (PC+GF15%)			
	$\oint 302 \text{mm} \times 197 \text{mm}$ ( $\oint 11 \text{ ginch} \times 7.75 \text{ inch}$ )			
Dimensions	$\Phi 302 \text{mm} \times 197 \text{mm} (\Phi 11.9 \text{inch} \times 7.75 \text{ inch})$ Approx 3.0 Kg (6.61 lb.)			
	Φ 302mm × 197mm (Φ11.9inch × 7.75 inch)           Approx. 3.0 Kg (6.61 lb.)           IP66,IK10(excluding glass window), ROHS, CE, FC,KC, BIS,UKCA			



# Dimensions(mm/inch):









