



HP-97PTZ20PE

2MP AI Smart-Tracking PTZ Camera

Product Features



HDR



Full H.D



VCA



Smart tracking



Perimeter



PoE



IP66



180m

* 20X optical zoom

The PTZ camera has 20x optical zoom lens which could provide details over a wide-open area.

* Support 1080P30fps H.265, triple streams

The PTZ has H.265 video compression which reduces bit rate down to 50% of H.264 without loss quality.

* Smart tracking

This PTZ has 0.75Tops deep-learning engine, which can detect max seven objects per scene, classify human/vehicles within 514mtrs in radius, 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 or time expired.

* Stavis effect and vivid color

Comparing to the first generation of 20x model, this generation improves image signal sensitivity by 250%, dynamic range by 200%, night vision distance to 180mtrs. In most city/town scenarios, it could output vivid colorful image without need to switch to B/W mode.

* 6pcs IR LED Arrays

Even in dim rural area it could capture human appearance and behaviors at 180m, as court evidence. by switching 3groups of total 6 pcs of IR LED Arrays.

* Low power design

The low power design ensures the PTZ could directly connect to PoE NVR up to 200mtrs distance away with cat5e cable, without need of AC110V / 220V power line and adaptor to supply.

* ONVIF protocol, API, and SDKs

It conforms to the ONVIF, ensuring interoperability between surveillance video products regardless of manufacturers.

* Good protection

The key components adopt aluminum alloy material, while the decoration parts adopt glass fiber enhanced plastic which could suffer from IK10 impact. It supports wide working temperature, IP66 class waterproof and 6KV outdoor lightning protection.

* Data privacy and Network safety protection

The PTZ supports digest signatures, HTTPS transmission, Strong passwords, etc., which confirms to most security regulation and data protection policy such as GDPR and NDAA.

* Stable supply-chain

This product has revised all key components vendors for a longer product life circle.



Specifications

Model	HP-97PTZ20PE
Image sensor	1/2.8" progressive scan CMOS image sensor, with BSI and NIR++
Max resolution	1920x1080
Mini. Illumination	Color:0.003 Lux @ (F2.57,AGC ON) B/W:0.0003Lux @ (F2.57, AGC ON);0Lux with IR
Image setting	Saturation, Brightness, Contrast, Sharpness, AGC, AWB, etc. adjusted by client
Shutter Speed	1/1 s – 1/30,000s, support slow shutter
White Balance	Auto/Manual/Indoor/Outdoor
Gain control	Auto/Manual
SNR	≥52dB
DayNight control	Auto Mode (ambient brightness threshold and delay time adjustable), Manual Mode, Scheduled, Timer.
Focus control	Auto, Manual (Near/Far)
Iris control	N/A
Noise Reduction	2D/3D DNR, Auto/Manual
AE Enhancement	BLC, HLC, DWDR
Digital Zoom	8X
Electronical Stabilizer	N/A
Optical Defog	N/A
Privacy Mask	Four areas per scene
Picture overlay	Logo picture could be overlayed on video, 16x16,24x24,32x32,48x48,64x64,96x96,128x128pixels
OSD overlay	Max 15 characters/line, eight lines, white or red font color, text such as week, date, time
Lens	
Focus length	f=5.2-104mm lens,20x optical zoom
Zoom Speed	Approx. 3s (optical zoom, wide-tele)
Field of View	Horizontal: 52.12°~ 3.36°; Vertical: 29.75°~ 1.9°; Diagonal: 59.36°~3.84°. (Wide-Tele), ±5%
Image distance	Wide: 1.5m ~ INF; tele: 5m ~ INF
Aperture Range	F2.57~F3.85
Iris Type	Fixed
IRCut type	Removable IRCut filter
PTZ	
Pan Range	360°endless
Pan speed	Configurable, from 0.5~80°/s; Preset speed: 80°/s
Tilt Range	From -10°to 90°, auto flip
Tilt Speed	Configurable, from 0.5°~ 80°/s, Preset speed: 80°/s
Proportional Zoom	Yes
Preset	360
Cruise	Eight cruises, up to sixteen presets for each cruise



Specifications

Model	HP-97PTZ20PE
Trace	Four 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
Supplement light	
IR Distance	180m (590 f.t.) 6pcs of IR Array, each 2Watt,3groups
Smart IR	Yes
Video	
Mainstream	50Hz: (1920 ×1080, 1280 ×960, 1280 ×720) 25fps; 60Hz: (1920 ×1080, 1280 ×960, 1280 ×720) 30fps.
Sub stream	50Hz: (704 ×576, 640 ×480, 352 ×288)25fps; 60Hz: (704 ×480, 640 ×480, 352 ×240)30fps.
Third Stream	50Hz: (1920 ×1080, 1280 ×960, 1280 ×720, 704 ×576, 640 ×480, 352 ×288) 25fps. 60Hz: (1920 ×1080, 1280 ×960, 1280 ×720, 704 ×480, 640 ×480, 352 ×240) 30fps.
Video compression	Mainstream: H.265+/H.265/H.264+/H.264 Sub/Third stream: H.265/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 16Mbps
Audio	
Audio compression	N/A
Audio Bit Rate	N/A
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 sixteen users, three 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, TLS1.2, Digest Signature, Session log, Strong P/W
API	ONVIF G/S/T, support TVT SDK and third-party management platform
Client	TVT N9000 1.4.9, 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
Events	
Basic event	Motion detection, video tampering alarm, alarm input, alarm output, exception (Network disconnected, IP address conflict, SD full, SD error)



Specifications

Model	HP-97PTZ20PE
Smart event	Line crossing detection, region entrance detection, intrusion detection, region exiting detection.
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	N/A
Fac comparison	N/A
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	N/A
Audio Interface	N/A
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	N/A
BNC	N/A
Reset button	Yes
Electric Fan&Heater	N/A
Water removal	raindrops eyebrow, anti-rain-drops lotus coating glass, quick-spinning
Frost removal	Desiccant, Vacuumize
General	
Languages	Czech; English;German;Hungarian;Italian;Japanese;Korean; Portuguese, Polish;Russian, Romanian, Spanish; Spanish (Mexico); Simplified Chinese; Turkish; Traditional Chinese, etc.
Power Supply	DC12V±25%,2000mA, PoE (802.3.af, type1), max 12W include IR ON+PTZ working
Working condition	-30°C ~ 55°C (-22°F ~ 131°F) IR OFF; -30°C ~ 45°CIR ON, Cold start at - 20°C (0.5-1 hour waiting),90%RH
Storage condition	-40°C ~ 70°C ; ≤ 95% RH
Material	Aluminum Alloy, Polymer (PC+GF15%)
Shield Material	Aluminum Alloy (ADC12); Polymer (PC+GF15%)
Dim. & Weight	Φ 173mm × 268mm (Φ6.8 inch × 10.55 inch), Approx. 2.0 Kg (4.4 lb.)
General	
Protection	IP66(IEC 60529-2013), IK09 (IEC 62262:2002),6000V Lightning Protection, Surge Protection and Voltage Transient Protection