

## 4-Inch 2MP 25X Smart Tracking



## HP-97PTZ20STPE-AI



Smart Tracking



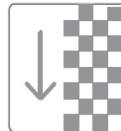
Starlight



True WDR



Auto Day/Night



3D DNR



PoE+



IP66



H.265



## System

HP-97PTZ20STPE-AI 2MP 25x Network IR speed dome camera is an entry level AI detection and tracking PTZ for wide range of intrusion and perimeter protection applications. Upon detecting illegal intrusion, the camera will trace it until the object leave out of restricted regions. The image sub-system is re-designed and fine-tuned for more reliable AI analysis and recognition results. This model could recognize max 15 objects per second, trace and zoom fit in pictures, recognize human faces up to 320m distance in most scenarios, or record human behaviors up to 1600m.

## Key Spec:

- 1/2.8" progressive scan CMOS
- Up to 1920×1080 resolution
- Mini illumination:
  - Color: 0.005 lux @ (F1.6 AGC ON)
  - B/W: 0.001 lux@ (F1.6 AGC ON)
  - 0 Lux with IR
- 25x optical zoom, 16x digital zoom
- 120 dB WDR, 3D DNR, Smart IR
- Up to 150m IR distance
- Smart H.265/H.264 video compression
- 0.5Tops Deep-learning Engine
- Smart tracking of human/vehicle
- Smart detection and perimeter protection
- IP66,-30°C~55°C, ADC12 + PC/GF
- PoE+ (802.3.at, class 3) and DC12V
- ONVIF, API and SDK

## SPECIFICATION:

| Camera Module        |                                                                                                                  |
|----------------------|------------------------------------------------------------------------------------------------------------------|
| Image sensor         | 1/2.8" progressive scan CMOS                                                                                     |
| Mini. Illumination   | Color: 0.005Lux @ (F1.65, AGC ON); B/W: 0.001Lux @ (F1.65, AGC ON); 0Lux with IR                                 |
| Image setting        | Flip, Mirror, Saturation, Brightness, Sharpness, AGC, and AWB adjusted by client software/browser                |
| Shutter Speed        | 1/1 s – 1/100,000 s                                                                                              |
| White Balance        | Auto/Manual/Indoor/Outdoor                                                                                       |
| Gain                 | Auto/Manual                                                                                                      |
| Day & Night          | IR Cut filter                                                                                                    |
| Digital Zoom         | 16x                                                                                                              |
| Privacy Mask         | No                                                                                                               |
| 3D DNR               | Auto/Manual                                                                                                      |
| BLC                  | Yes                                                                                                              |
| HLC                  | Yes                                                                                                              |
| WDR                  | 120 dB                                                                                                           |
| Defog                | Electronic                                                                                                       |
| EIS                  | Yes                                                                                                              |
| Regional Exposure    | No                                                                                                               |
| Picture overlay      | Logo picture could be overlaid on video with 128x128pixels,24bits BMP format                                     |
| Lens                 |                                                                                                                  |
| Focus length         | f=4.8-120mm lens,25x optical                                                                                     |
| Zoom Speed           | Approx. 3.6s (optical zoom, wide-tele)                                                                           |
| Field of View        | Horizontal: 57.6° to 2.5°(wide-tele)<br>Vertical: 34.4° to 1.4°(wide-tele)<br>Diagonal: 64.5° to 2.9°(wide-tele) |
| Working distance     | wide: 1.0m ~ INF; tele: 1.5m ~ INF                                                                               |
| Aperture Range       | F1.65 ~ F3.8 (wide-tele)                                                                                         |
| PTZ                  |                                                                                                                  |
| Pan Range            | 360°endless                                                                                                      |
| Pan speed            | Configurable, from 0.1~80°/s; Preset speed: 80°/s                                                                |
| Tilt Range           | From -5° to 90°                                                                                                  |
| Tilt Speed           | Configurable, from 0.1°~ 80°/s, Preset speed: 80°/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/Track/Auto Scan/Random Scan                                                                        |
| 3D Positioning       | Support                                                                                                          |
| PTZ Position Display | Support                                                                                                          |
| Schedule Task        | Preset/Cruise/Track/Random Scan/Boundary Scanning /Dome reboot                                                   |
| IR                   |                                                                                                                  |
| IR Distance          | 150m                                                                                                             |

|                           |                                                                                                                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Smart IR                  | Yes                                                                                                                                                                                                              |
| <b>Network</b>            |                                                                                                                                                                                                                  |
| Max Resolution            | 1920×1080                                                                                                                                                                                                        |
| Main stream               | 1920×1080, 1280×720 25/30fps                                                                                                                                                                                     |
| Sub stream                | 25fps (720P, 704 × 576, 352 × 288) ; 30fps (720P, 704 × 480, 352 × 240)                                                                                                                                          |
| Third Stream              | 25fps (704 × 576, 640 × 480, 352 × 288); 30fps (704 × 480, 640 × 480, 352 × 240)                                                                                                                                 |
| SVC                       | Yes                                                                                                                                                                                                              |
| Video compression         | H.265/H.264/MJPEG                                                                                                                                                                                                |
| Audio Enhancement         | No                                                                                                                                                                                                               |
| 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                                                                                  |
| 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                                                         |
| <b>Smart Features</b>     |                                                                                                                                                                                                                  |
| Basic event               | Motion detection, video exception alarm, SD card full, SD card error                                                                                                                                             |
| Face recognize            | Default off, max 15 human faces per second.                                                                                                                                                                      |
| Face compare              | Default off                                                                                                                                                                                                      |
| People Density            | Not support by this version                                                                                                                                                                                      |
| Smart Detection           | Intrusion detection, Line crossing detection, Region entrance detection, Region exiting detection, Scene change detection, target counting, Support alarm triggering by human or vehicle, filtering flag/animal. |
| Smart Tracking            | Manual Tracking, Auto Tracking (human or vehicle by software setting)                                                                                                                                            |
| <b>System Integration</b> |                                                                                                                                                                                                                  |
| Alarm Interface           | None                                                                                                                                                                                                             |
| Audio Interface           | None                                                                                                                                                                                                             |
| Alarm Linkage             | Alarm actions, 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)                                                                                                                                                         |
| CVBS                      | None                                                                                                                                                                                                             |
| RS 485                    | None                                                                                                                                                                                                             |
| Storage                   | On-Body memory card slot, support microSD/SDHC/SDXC, up to 256G                                                                                                                                                  |
| 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, Chrome41.0-44, Firefox30.0-51, Safari8.0-11                                                                                                                                                              |
| <b>General</b>            |                                                                                                                                                                                                                  |
| Power                     | DC12V or PoE+ (802.3.at, class 3), (Max 22W, include IR on, Heater on, Fan working)                                                                                                                              |
| Working condition         | -30°C ~ 55°C (-22°F ~ 131°F),90%RH less (non-condensing),Cold start at - 20°C                                                                                                                                    |
| Storage condition         | -40°C ~ 65°C ; ≤ 95% RH                                                                                                                                                                                          |
| Protection                | IP66, 4000V Lightning Protection, Surge Protection and Voltage Transient Protection                                                                                                                              |
| Material                  | Aluminum Alloy;PC+GF10%                                                                                                                                                                                          |
| Dimensions                | Φ 173mm × 247mm ( 6.8" Φ × 9.7")                                                                                                                                                                                 |
| Weight                    | Approx. 2.1 Kg (13.22 lb.)                                                                                                                                                                                       |
| Certification             | IP66,ROHS,CE,FC                                                                                                                                                                                                  |
| Active                    | Hi3516CV500+IMX462 Chipsets, active till 2022.Dec.                                                                                                                                                               |