

# TNO-P9072EPT1-Z

4K Network Explosion Proof Fixed AI Camera



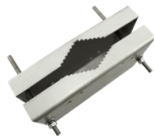
## Key Features

- 8 MP (3840 x 2160) resolution
- 3.9 - 10mm f1.5 Varifocal, i-CS Lens
- H.265, H.264, MJPEG codec support
- Multiple streaming, WiseStreamII support
- Day & Night (ICR), WDR (120dB)
- DIS with Built-in Gyro sensor
- Dual SD Memory slots (Total maximum 512GB)
- Hazardous Rated for Class II III Division 1 Groups B, C, D, E, F, G
- cFmus Approved and II 2 G Ex db IIB+H2 II 2 D Ex tb IIIC IECEX ATEX certified
- Powder-coated aluminum housing
- License-free Wisenet AI analytics including object detection, Best Shot, & metadata

## Accessories (Optional)



HT-F1XX-WM Wall Mount (Required)



HT-SPMA-SD Pole Mount Adapter



HT-SD-CM Corner Mount Adapter



HT-SF-FP Fall Protection Lanyard Kit

US: Class I Division 1 Groups BCD T6 Ta = -40°C to +60°C, Type 4X, IP66  
 Class II/III Division 1 Groups EFG Ta = -40°C to +60°C, Type 4X, IP66  
 Canada: Class I Division 1 Groups BCD T6 Ta = -50°C to +60°C, Type 4X, IP66  
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 Class I, Zone 1, AEx/Ex db IIB+H2 T5 Gb Ta = -50°C to +60°C, Type 4X, IP66  
 Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -50°C to +60°C, Type 4X, IP66



II 2 G Ex db IIB+H2 T5 Gb Ta = -50°C to +60°C, IP66  
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 CERT NO. FM18ATEX0073X & IECEX FMG 18.0029X

## TNO-P9072EPT1-Z

<b>VIDEO</b>	
Imaging Device	1/1.8" 8 MP CMOS
Total Pixels	3,864(H) x 2,180(V) 8.42 MP
Effective Pixels	3,840(H) x 2,160(V) 8.29 MP
Scanning System	Progressive Scan
Minimum Illumination	Color : 0.03Lux (F1.2, 1/30sec), B/W : 0.003Lux (F1.2, 1/30sec)
S / N Ratio	50dB
Video Out	CVBS : 1.0 Vpp / 75Ω composite, 720 x 480, for installation USB : micro USB type B, 1280 x 720 for installation
<b>LENS</b>	
Focus Control	Simple focus / Manual, Remote control via network, Button control (Manual, Simple focus)
Lens Type	Varifocal f1.5 / i-CS lens, CS lens mount
Focal Length/ Angular FoV	3.9-10mm
<b>OPERATIONAL</b>	
Camera Title	Off / On (Displayed up to 85 characters) - English / Numeric / International characters / Special characters - Common : Multi-line (Max. 5), Color (Grey / Green / Red / Blue / Black / White), Transparency, Auto scale by resolution
Day & Night	Auto (ICR) / Color / B/W / External / Schedule
Backlight Compensation	Off / BLC / HLC (Masking / Dimming), WDR
Wide Dynamic Range	120dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNRV (2D+3D noise filter) (Off / On)
Digital Image Stabilization	Off / On (Built-in Gyro sensor)
Defog	Off / Auto (Input from fog detection) / Manual
Motion Detection	Off / On (8ea, 8point polygonal zones), Handover
Privacy Masking	Off / On (6ea, Polygonal) - Color : Grey / Black / White
Gain Control	Off / Low / Middle / High / Manual
White Balance	ATW / AWC / Manual / Indoor / Outdoor (Included mercury & sodium)
Contrast	Level adjustment
LDC (Lens Distortion Correction)	Off / On (5 levels with minimum / maximum)
Electronic Shutter Speed	Minimum / Maximum / Anti Flicker (2 ~ 1/12,000sec)
Digital PTZ	24x, AI Digital PTZ (Preset, Group)
Flip / Mirror	Off / On, Halfway view : 90°/270°
Video & Audio Analytics	- Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line. Includes metadata & Best Shot - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection
Alarm I/O	Input 1ea / Output 1ea / DC 12V Power(Max. 50mA) 1ea
Remote Control Interface	RS-485
RS-485 Protocol	Samsung-T/E, Pelco-P/D, Sungjin, Panasonic, Honeywell, AD, Vicon, GE, Bosch
Alarm Triggers	Alarm input, Motion detection, Video & Audio analytics, Network disconnect
Alarm Events	File upload via FTP, E-mail, Notification via E-mail, Local storage (SD/SDHC/SDXC) or NAS recording at event triggers, External output, DPTZ preset
Pixel Counter	Support
<b>NETWORK</b>	
Ethernet	Shielded RJ-45 (10/100/1000 BASE-T)
Video Compression Format	H.265 / H.264 (MPEG-4 part 10/AVC) : Main / Baseline / High, MJPEG
Resolution	2560 x 1920, 2560 x 1440, 1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240
Maximum Framerate	H.265 / H.264 : Maximum 30fps at all resolutions, MJPEG : Maximum 30fps
Smart Codec	Manual mode (Area-based : 5ea)
WiseStream II	Support
Video Quality Adjustment	H.265 / H.264 : Target bitrate level control, MJPEG : Target bitrate level control
Bitrate Control Method	H.265 / H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 10 profiles)
Audio In	Selectable (Microphone in / Line in), Maximum output level : 1Vrms
Audio Out	Supply voltage : 2.5V DC (4mA), Input impedance : approximately 2K Ohm Line out, Maximum output level : 1Vrms
Audio Compression Format	G.711 u-law/G.726 selectable, G.726 (ADPCM) 8KHz, G.711 8KHz G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps, AAC-LC : 48Kbps at 8/16/32/48KHz
Audio Communication	Bi-directional (2-way)
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour, HTTPS(SSL) login authentication, Digest login authentication
Security	IP address filtering, User access log, 802.1X authentication (EAP-TLS, EAP-LEAP)
Streaming Method	Unicast / Multicast
Maximum User Access	20 users at unicast mode
Edge Storage	SD/SDHC/SDXC 2 slots (Up to 512GB) - Continuous recording (1st slot to 2nd slot) NAS (Network Attached Storage), Local PC for instant recording
Application Programming Interface	ONVIF profile S/G, SUNAPI (HTTP API), Wisenet Open Platform
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Plugin-Free Webviewer - Supported Browser : Google Chrome 54, MS Edge 38, Mozilla Firefox(49Window 64bit only), MS Internet Explorer 11, Apple Safari 9 * Mac OS X only
Web Viewer	
Central Management Software	Wisenet WAVE, SmartViewer
<b>ENVIRONMENTAL</b>	
Operating Temperature PoE only	-40°C ~ +55°C (-40°F ~ +131°F)
Storage Temperature / Humidity	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH
Ingress Protection	Type 4x / IP66
<b>ELECTRICAL</b>	
Input Voltage	PoE+ (IEEE802.3a)
Power Consumption	Maximum 25.5W (IEEE802.3at PoE+)
<b>MECHANICAL</b>	
Color / Material	RAL2000-Yellow Orange / Powder-coated Aluminum
Dimensions (WxHxD)	7.2" x 5.97" x 13.85"
Weight	14 lb (6.35kg)

\* The latest product information / specification can be found at hanwhasecurity.com

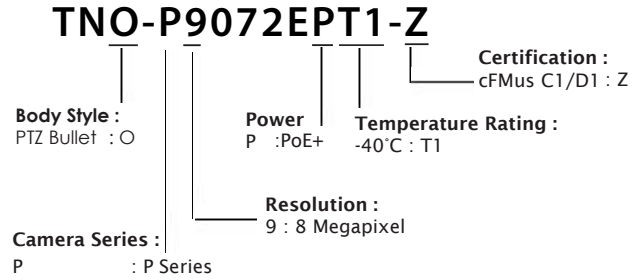
\* Design and specifications are subject to change without notice.

\* Wisenet is the proprietary brand of Hanwha Techwin, formerly known as Samsung Techwin.

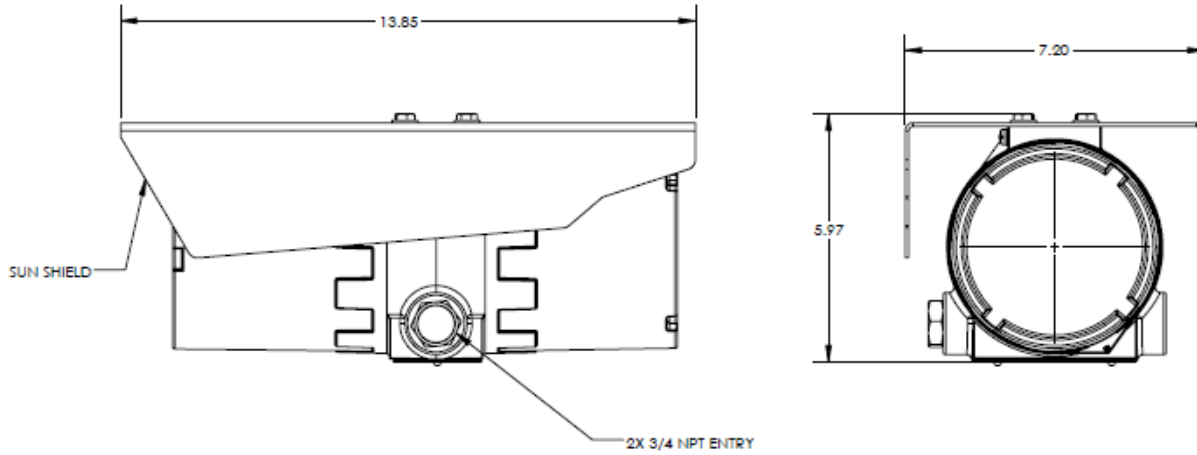
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Model Number:



## Dimensions



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