



Network

PTZ

TNP-A9430RWB

8MP AI Ruggedised PTZ Camera



Key Features

- Max 8MP 43x
- Support optical Image Stabilization
- IP66, IP68, NEMA4X
- NEMA TS-2 (2.2.7.2-8, 2.2.8, 2.2.9)
- IR viewable length 500 m
- Wind load max.160 mph (257km/h)
- Operating temperature : -50 ~60°C
- Analytics events based on AI engine: Object detection (Person/Face/Vehicle/License plate), IVA (Virtual line/Area, Enter/Exit, Loitering, Direction, Intrusion), Slip&Fall detection, Motion detection
- Support BestShot and full attributes
- Support Dynamic Privacy Masking
- extremeWDR, WiseNR II (Based on AI engine), WiseStream (Based on AI engine)
- Support Wisepower (Power monitoring, ECO mode)
- Device certificate (Hanwha Vision Root CA), Secure storage (Secure element with FIPS 140-3 level3/CC EAL6+ certified), SBOM

Compatible Devices



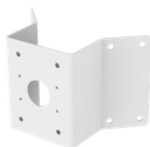
SBP-004PBB



SBP-004WMB



SBP-150PMW



SBP-156KMW



SPP-K004EP



SPP-C00402EP



SPP-C00405EP



SPP-C00410EP

TNP-A9430RWB

8MP AI Ruggedised PTZ Camera



Specifications

Video

Görüntüleme Aygıtı	Boyut	1/1.8"
	Tür	CMOS
Çözünürlük	3840x2160, 3328x1872, 2592x1944, 2592x1464, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	
En Fazla Kare hızı	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps(@8MP Max. 5fps)
Min. Aydınlatma (Lüks)	Renk(1/30sn, 30IRE)	0.06 Lux(F1.69, 1/30sec, 30 IRE)
	SB(1/30sn, 30IRE)	0.006 Lux(F1.69, IR LED Off), 0Lux (IR LED On)

Lens

Odak Uzunluğu (mm)	6.1~262.4	
Yakınlaştırma Oranı	Optik	43
	Dijital	1367
Maks. Diyafram Açıklığı Oranı (F numarası)	Geniş	F1.69
	Tele	F4.92
Açısal Görüş Alanı	Yatay	63.62°(Wide)~1.77°(Tele)
	Dikey	37.69°(Wide)~0.99°(Tele)
	Diagonal	70.9°(Wide)~2.05°(Tele)
Min. Nesne Mesafesi	5m(16.4ft)	
Odak Kontrolü	Auto, Manual, Oneshot AF, Focus save	
Lens Tipi	P iris(IR corrected)	

Pan / Tilt / Döndürme

Pan / Tilt / Döndürme Aralığı	Pan	360° Endless
	Tilt	Upright: 140°(50°~90°), Canted: 165°(75°~90°), Inverted: 140°(90°~50°)
Pan Hızı	Önayar	Max. 160°/sec
	Manuel	0.024°/sec~160°/sec

Pan / Tilt / Döndürme

Tilt Hızı	Önayar	Max. 160°/sec
	Manuel	0.024°/sec~160°/sec
Sıra	Preset(300ea), Swing, Group(6ea), Trace, Tour, Auto Run, Schedule	
Önayar Hassasiyeti	±0.07°	

İşletimsel

Yön Göstergesi	Support	
Gündüz ve Gece	Auto(ICR)	
Arka Işık Dengeleme	BLC, HLC, WDR, SDR	
Geniş Dinamik Aralık (dB)	120	
Dijital Gürültü Azaltma	WiseNR II (Based on AI engine), SSNR V	
Dijital Görüntü Sabitleme	Support(built-in gyro sensor)	
Optik Görüntü Sabitleme	Support	
Sis Giderme	Support	
Hareket Algılama	Miktar	8ea
	Şekil	8point Polygonal zones
Gizlilik Maskesi	Miktar	32ea
	Şekil	4point Quadrangle zones
	Renk / Seçenek	Gray, Green, Red, Blue, Black, White, Mosaic
	Dinamik Gizlilik Maskesi: Renk / Seçenek	Gray, Green, Red, Blue, Black, White, Mosaic, Purple, Yellow
Kazanç Kontrolü	Off, Max gain, Manual	
Beyaz Dengesi	ATW, NarrowATW, AWC, Manual, Indoor, Outdoor, Mercury, Sodium	
Elektronik Obtüratör	Mod	Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine)
	Hız Aralığı	2~1/30,000sec
Video Döndürme	Flip&Mirror	
Kurulum Yönü	Upright, Inverted, Canted	
Alarm Arayüzü	Diğer	Support alarm I/O via optional I/O box
Alarm Tetikleyiciler	Analytics, Network disconnect, Alarm input, Time schedule, MQTT subscription	
Alarm Tetikleyici Gerçekleştğinde Alarm Olayları	File upload(image): e-mail/FTP, File upload(video clip): FTP/SFTP, Notification: e-mail, Recording: SD/SDHC/SDXC or NAS recording at event triggers,Alarm output, Handover: PTZ preset,send message by HTTP/HTTPS/TCP,Audio clip playback, MQTT: publication	
Ses Girişi	Support via optional I/O box	
Ses Çıkışı	Support via optional I/O box	
Işık Türü	IR LED	

İşletimsel

Işık Görüntülenebilir Uzunluğu	IR	500m(1,640.42ft)
IR Dalga Boyu		850nm
Su Giderme		Support(with Wiper)
Buz Giderme		Window, Pan
Otom. İzleme		Support, Object auto tracking(Person/Vehicle), Target lock tracking

Analiz Araçları

Sınıflandırılmış Nesne Türü		Person, Face, Vehicle, License plate
Öznitelikler	Kişi	Upper/Lower clothes color, Gender, Bag
	Araç	Type(car, bus, truck, motorcycle, bicycle), Color
	Yüz	Age, Gender, Face mask, Glasses
Küçük resim		BestShot
Analiz Araçları Olayları	AI Motoru Bazında	Object detection, Virtual line(Crossing/Direction), Motion detection, Slip & fall detection, Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear), Auto tracking
	Normal	Tampering, Audio detection, Shock detection

Ağ

Ethernet		RJ-45 Push-pull Connector(10/100BASE-T)
Video Sıkıştırma		H.265/H.264: Main/Baseline/High, MJPEG
Smart Codec		WiseStream(Based on AI engine)
Bit Hızı Kontrolü		H.265/H.264: CBR or VBR, MJPEG: VBR
Yayın akışı	Unicast	Up to 20 users
	Multicast	Support
	Çoklu Yayın Akışı	Up to 10 profiles
Protokol		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SFTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT, NTCIP 1205, Syslog
Uygulama Programlama Arayüzü	ONVIF	S, G, T, M
	Diğer	SUNAPI(HTTP API), Hanwha Vision Open Platform
Direkt Bulut Bağlantısı		Support

Güvenlik

İS / Yerleşik Yazılım Koruması		Encrypted firmware, Secure boot, Signed firmware
Kullanıcı kimlik doğrulaması		Digest authentication, Prevent brute-force attack
Ağ kimlik doğrulaması		IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Güvenli İletişim		HTTPS, WSS(WebSocket Secure), SRTP
Erişim Denetimi		IP-based access control, MAC-based access control, Auto logout

Güvenlik

Veri Koruması	Encryption credentials, Encrypt compress for live recording file export
Denetim	Access / System / Event Log management
Aygıt Kimliği	Device certificate(Hanwha Vision Root CA)
Güvenli Depolama	SDcard partition encrypt(AES-256), Secure element
Tedarik Zinciri Güvenliği	SBOM
Güvenlik Sertifikası	Secure element(FIPS 140-3 level3, CC EAL6+), ETSI EN 303 645

Genel

SoC	Type	Wisenet 9
	Dual NPU	Support
Bellek	RAM	4GB
	Flaş	8GB eMMC
Kenar Depolama	Mikro SD/SDHC/SDXC	Max. 1TB x 1slot
Kenar Depolama (OnCloud)	Mikro SD/SDHC/SDXC	Max. 1TB x 1slot *Hanwha Vision branded microSD cards have been certified and recommended for OnCloud edge recording.

Çevresel ve Elektriksel

Çalışma Koşulu	Sıcaklık	-50°C~+60°C(-58°F~+140°F)
	Nemlilik	0~100% RH(condensing)
	Diğer	+74°C(+165°F)(Max) based on NEMA-TS 2(2.2.7), Start up should be done at above -30°C, Humidity control with AIR vent
Depolama Koşulu	Sıcaklık	-50°C~+60°C(-58°F~+140°F)
	Nemlilik	0~90% RH(non-condensing)
Rüzgar Yüğü		Sustained 257km/h (160mph)
EPA (Etkili Planlanan Alan)		0.095m ²
Giriş Voltajı		HPoE(IEEE802.3bt type4, Class8)
Güç Tüketimi	PoE	Max 71W, Typical 33.2W
Wisepower		Power mode, Power monitoring, ECO mode

Mekanik

Renk		Black
Malzeme		Aluminum, PC(Polycarbonate), ITO Glass
Malzeme Yönetimi	Beyanname	RoHS(EU RoHS directive 2011/65/EU and IEC/EN 63000:2018), REACH(Regulation (EC) No. 1907/2006), Conflict mineral policy(Section 1502 of US Dodd Frank Act)
RAL Kodu		RAL9005
Ürün Boyutları		Upright Normal/Inverted : 293.4(W)x205.6(D)x399.9(H)mm (11.55x8.09x15.74") Upright Canted : 293.4(W)x301.9(D)x363.6.9(H)mm (11.55x11.89x14.31")
Ürün Ağırlığı		10.5kg(9.5kg: Excluding installation part)

Sertifikasyonlar ve Standartlar

EMC	EN 50121-4, FCC 47 CFR 15 Subpart B Class A, ICES-3(A)/NMB-3(A), CE/UKCA - EN55032 Class A, EN 50130-4, VCCI CISPR 32 Class A, RCM AS-NZS CISPR 32 Class A, KS C 9832 Class A, KS C 9835, EN 55035
Emniyet	UL 62368-1, CAN/CSA C22.2 NO. 62368-1, IEC 62471, IEC/EN/UL 62368-1 GS UL cUL CE FCC VCCI CB
Ortam	IEC 60529 IP66, IEC 60529 IP68, IEC 62262 IK10, NEMA TS 2-2013 (2.2.7, 2.2.8, 2.2.9), NEMA 250 type 4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, MIL-STD-810H 501.7, MIL-STD-810H 502.7, MIL-STD-810H 503.7, MIL-STD-810H 505.7, MIL-STD-810H 506.6, MIL-STD-810H 507.6, MIL-STD-810H 509.7, MIL-STD-810H 510.7, MIL-STD-810H 521.4, IEC 60068-2-52:2017, NEMA TS2, 2.1.9, NEMA TS2, 2.1.10, NEMA TS2, 2.2.4, NEMA 250, 5.6, ASTM B117

DORI (EN62676-4 standardı)

Algılama (25PPM/ 8PPF)	Geniş	123.8m(406.23ft)
	Tele	4972m(16311ft)
Gözlemlleme (63PPM/ 19PPF)	Geniş	49.5m(162.49ft)
	Tele	1989m(6525ft)
Tanıma (125PPM/ 38PPF)	Geniş	24.8m(81.25ft)
	Tele	994.3m(3262ft)
Tanımlama (250PPM/ 76PPF)	Geniş	12.4m(40.62ft)
	Tele	497.2m(1631ft)

TNP-A9430RWB
8MP AI Ruggedised PTZ Camera



CAD

Unit: mm [inch]

