



Network PTZ

TNP-A6550RW

2MP AI Ruggedized PTZ Camera



Key Features

- Max 2MP 55x
- IP66, IP68, NEMA4X
- IR viewable length 500 m
- NEMA TS-2 (2.2.7.2-8, 2.2.8, 2.2.9)
- Wind load max.160 mph
- 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-004PBW SBP-004WMW

TNP-A6550RW

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Specifications

Video

Imaging Device	Size	1/2.8"
	Type	CMOS
Resolution		1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264	60fps/50fps(60Hz/50Hz)(WDR off) / 30fps/25fps(60Hz/50Hz)(WDR on)
	MJPEG	30fps
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.02Lux(F1.6, 1/30sec)
	BW(1/30sec, 30IRE)	0.002 lux (1/30sec,F1.6), 0Lux(IR LED On)

Lens

Focal Length (mm)		4.75~261.4
Zoom Ratio	Optical	55
	Digital	1760
Max Aperture Ratio (F number)	Wide	F1.6
	Tele	F6.5
Angular Field of View	Horizontal	58.6°(Wide)~1.23°(Tele)
	Vertical	34.8°(Wide)~0.71°(Tele)
	Diagonal	65.5°(Wide)~1.39°(Tele)
Min. Object Distance		5m(16.4ft)
Focus Control		Auto, Manual, Oneshot AF, Focus save
Lens Type		DC auto iris

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Pan	360° Endless
	Tilt	Upright: 140°(50°~90°), Canted: 165°(75°~90°), Inverted: 140°(90°~50°)
Pan Speed	Preset	Max. 160°/sec
	Manual	0.024°/sec~160°/sec
Tilt Speed	Preset	Max. 160°/sec
	Manual	0.024°/sec~160°/sec

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com
Hanwha Vision is formerly known as Hanwha Techwin.

Pan / Tilt / Rotate

Sequence	Preset(300ea), Swing, Group(6ea), Trace, Tour, Auto Run, Schedule
Preset Accuracy	±0.07°

Operational

Direction Indicator	Support
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSDR
Wide Dynamic Range (dB)	120
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support(built-in gyro sensor)
Defog	Support
Motion Detection	Quantity
	Shape
Privacy Masking	Quantity
	Shape
	Color / Option
	Dynamic Privacy Masking: Color / Option
Gain Control	Off, Max gain, Manual
White Balance	ATW, NarrowATW, AWC, Manual, Indoor, Outdoor, Mercury, Sodium
Electronic Shutter	Mode
	Speed Range
Video Rotation	Flip&Mirror
Installation Direction	Upright, Inverted, Canted
Alarm Interface	Others
Alarm Triggers	Analytics, Network disconnect, Alarm input, Time schedule, MQTT subscription
Alarm Events When Alarm Trigger Occurred	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
Audio In	Support via optional I/O box
Audio Out	Support via optional I/O box
Light Type	IR LED
Light Viewable Length	IR 500m(1,640.42ft)
IR Wavelength	850nm
Water Removal	Support(with Wiper)
Ice Removal	Window, Pan

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Operational

Auto Tracking	Support, Object auto tracking(Person/Vehicle), Target lock tracking
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Analytics

Classified Object Type	Person, Face, Vehicle, License plate
Attributes	Person Upper/Lower clothes color, Gender, Bag
	Vehicle Type(car, bus, truck, motorcycle, bicycle), Color
	Face Age, Gender, Face mask, Glasses
Thumbnail	BestShot
Analytics Events	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

Network

Ethernet	RJ-45 Push-pull Connector(10/100BASE-T)
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG
Smart Codec	WiseStream(Based on AI engine)
Bitrate Control	H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast Up to 20 users
	Multicast Support
	Multiple Streaming Up to 10 profiles
Protocol	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
Application Programming Interface	ONVIF S, G, T, M
	Others SUNAPI(HTTP API), Hanwha Vision Open Platform
Direct Cloud Connection	Support

Security

OS / Firmware Protect	Encrypted firmware, Secure boot, Signed firmware
User authentication	Digest authentication, Prevent brute-force attack
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Secure Communication	HTTPS, WSS(WebSocket Secure), SRTP
Access Control	IP-based access control, MAC-based access control, Auto logout
Data Protect	Encryption credentials, Encrypt compress for live recording file export
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	SDcard partition encrypt(AES-256), Secure element
Supply Chain Security	SBOM

Security

Security Certificate	Secure element(FIPS 140-3 level3, CC EAL6+), Consumer IoT Security Standard (ETSI EN 303 645)
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General

SoC	Type	Wisenet9
	Dual NPU	Support
Memory	RAM	4GB
	Flash	16GB eMMC
Edge Storage	Micro SD/SDHC/SDXC	Max. 1TB x 1slot
Edge Storage(OnCloud)	Micro SD/SDHC/SDXC	Max. 1TB x 1slot *Hanwha Vision branded microSD cards have been certified and recommended for OnCloud edge recording.

Environmental & Electrical

Operating Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~100% RH(condensing)
	Others	+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
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
Wind Load		Sustained 257km/h (160mph)
EPA(Effective Projected Area)		0.095m ²
Input Voltage		PoE++(IEEE802.3bt type4, Class8)
Power Consumption	PoE	Max. 71W, typical 28.3W
Wisepower		Power mode, Power monitoring, ECO mode

Mechanical

Color	White, Black
Material	Aluminum, PC(Polycarbonate), ITO Glass
Material Management	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 Code	RAL9003, RAL9005
Product Dimensions	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")
Product Weight	10.4kg(9.4kg: Excluding installation part)

Certifications & Standards

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
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1, IEC 62471, IEC/EN/UL 62368-1 GS UL cUL CE FCC VCCI CB

Certifications & Standards

Environment	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
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DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	68.4m(224.5ft)
	Tele	3577.4m(11736.7ft)
Observe (63PPM/ 19PPF)	Wide	27.4m(89.8ft)
	Tele	1430.9m(4694.7ft)
Recognize (125PPM/ 38PPF)	Wide	13.7m(44.9ft)
	Tele	715.5m(2347.3ft)
Identify (250PPM/ 76PPF)	Wide	6.8m(22.5ft)
	Tele	357.7m(1173.7ft)