



Network

Fisheye

XNF-9013RV

12MP AI IR Fisheye Camera



Key Features

- AI technology
 - Classified object type: Person/Face/Vehicle/License plate
 - Support Detection Shot
 - Object detection-Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit)
- Stereographic type fisheye lens
- Improved image quality
 - extreme WDR (2MP@60fps) by scene Analysis and Local contrast enhancement
 - WiseNR II , Auto prefer shutter control based on AI
- Resolution/Framerate
 - Original view-Max.30fps/25fps@3008x3008 (60Hz/50Hz)
 - Double panorama-Max.30fps/25fps@3584x1792 (60Hz/50Hz)
 - Single panorama-Max.30fps/25fps@3584x896 (60Hz/50Hz)
- WiseStreamIII based on AI
- Next level cybersecurity
 - Device Certificate (Root CA, pre-installed)
 - TPM 2.0 (FIPS 140-2 certified), Secure OS/boot/storage, Verified FW forgery
- Adjustable IR distance with WisePower : PoE+mode-13m, PoE mode-8m
- Mirco SD/SDHC/SDXC 2 slot: Max. 1TB (512GBx2ea)
- Reinforced durability
 - IP66, NEMA4X, IK10, Metal shielded RJ-45
 - Hard-coated dome bubble
- Additional accessories
 - Black Skin Cover (SBC-160BF), Tilted wall mount (SBP-160TMW1)

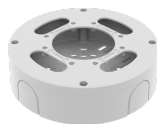
Compatible Accessories (Optional)



SBC-160BF



SBP-160HMW1



SBV-180BW



SBV-180WW



SBP-150CMI



SBP-300CMI



SBP-300CMW1

XNF-9013RV



SBP-900CMW



SBP-300CMTW



SBP-300CMTS



SBP-300WMW



SBP-300WMW1



SBP-390WMW2



SBP-160WMW1

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Specifications

| Video | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imaging Device | 1/2.3" CMOS |
| Resolution | Original view(1:1): 3008x3008~480x480 Double panorama(2:1): 3584x1792~640x320 Single panorama(4:1): 3584x896~640x160 Quad view: 3584x2688~640x480 Q1/Q2/Q3/Q4(4:3): 1792x1344~640x480 |
| Max. Framerate | H.265/H.264: Original view-Max. 30fps/25fps@3008x3008(60Hz/50Hz), Double panorama-Max. 30fps/25fps@3584x1792(60Hz/50Hz) Single panorama-Max. 30fps/25fps@3584x896(60Hz/50Hz) MJPEG: Max. 30fps(@9MP Max. 5fps) |
| Min. Illumination | Color: 0.39Lux(F2.2, 1/30sec, 30IRE) BW: 0Lux(IR LED on) |
| Video Out | CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P), for Installation USB: Micro USB Type B, 1280x720 for installation |
| Lens | |
| Focal Length (Zoom Ratio) | 1.08mm fixed focal |
| Max. Aperture Ratio | F2.2 |
| Angular Field of View | H: 187° / V: 187° / D: 187° |
| Min. Object Distance | 0.5m(1.64ft) |
| Focus Control | Simple focus |
| Pan / Tilt / Rotate | |
| Pan / Tilt / Rotate Range | Lens rotation |
| Operational | |
| Camera Title | Displayed up to 85 characters |
| Day & Night | Auto(ICR) |
| Backlight Compensation | BLC, HLC, WDR, SDR |
| Wide Dynamic Range | extremeWDR(120dB) |
| Digital Noise Reduction | WiseNR II (Based on AI engine), SSNR V |
| Motion Detection | 8ea, 8point Polygonal zones |
| Privacy Masking | 32ea, 4point Quadrangle zones - Color: Gray/Green/Red/Blue/Black/White - Mosaic |
| Gain Control | Off / Max Gain / Manual |
| White Balance | ATW / NarrowATW / AWC / Manual / Indoor / Outdoor |
| Electronic Shutter Speed | Minimum / Maximum / Anti flicker(1/5~1/12,000sec) Prefer shutter control(Based on AI engine) |
| Video Rotation | Flip, Mirror |

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.

| | |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Analytics | Classified object type: Person/Face/Vehicle(Type: car/bus/truck/motorcycle/bicycle)/License plate Attributes: Vehicle(Type: car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine - Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Motion detection Analytics events - Defocus detection, Tampering, Fog detection, Audio detection, Sound classification, Virtual area(Appear/Disappear) |
| Business Intelligence | Based on AI engine: People/Vehicle counting, Queue management, Heatmap |
| Alarm I/O | 2 configurable I/O ports |
| Alarm Triggers | Analytics, Network disconnect, Alarm input, App event, Time schedule, MQTT subscription |
| Alarm Events | When alarm trigger occurred - File upload(image): e-mail/FTP/SFTP - 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 | Selectable(mic in/line in/built-in mic) |
| Audio Out | Line out |
| IR Viewable Length | WiseIR, PoE: 8m(26.25ft), PoE+: 13m(42.65ft) |
| Network | |
| Ethernet | Metal shielded RJ-45(10/100BASE-T) |
| Video Compression | H.265/H.264: Main/Baseline/High, MJPEG |
| Audio Compression | G.711 u-law /G.726 Selectable G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC: 48Kbps at 16KHz |
| Smart Codec | Manual(5ea area), WiseStreamIII(Based on AI engine) |
| Bitrate Control | H.264/H.265: CBR or VBR MJPEG: VBR |
| Streaming | Unicast(20 users) / Multicast Multiple streaming(Up to 10 profiles, 5 virtual channel support) |
| 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 |
| Application Programming Interface | ONVIF Profile S/G/T/M SUNAPI(HTTP API) Wisenet open platform |
| Security | |
| OS / Firmware Protect | Encrypted Firmware, Secure boot, Signed Firmware |
| User authentication | Digest Authenticon, Prevent brute-force attacks |
| 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 |
| 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 | TPM, HTPM(Hanwha trusted platform module), SDcard partition encrypt |
| Security Certificate | TPM with FIPS 140-2 level 2 |
| General | |

| | |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Webpage Language | English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek |
| Edge Storage | Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2) |
| Memory | 4GB RAM, 512MB Flash |

Environmental & Electrical

| | |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Operating Temperature / Humidity | -40°C~+60°C(-40°F~+140°F) / 0~95% RH(non-condensing) |
| Storage Temperature / Humidity | -50°C~+60°C(-58°F~+140°F) / 0~90% RH |
| Certification | IP66, NEMA4X, IK10 |
| Input Voltage | WisePower(PoE(IEEE802.3af, class3)/PoE+(IEEE802.3at type2, Class4)), 12VDC |
| Power Consumption | PoE: Max 12.95W, typical 9.4W, 12VDC: Max 12.9W, typical 9.0W PoE+: Max 23.0W, typical 9.4W, 12VDC: Max 22.0W, typical 9.0W |

Mechanical

| | |
|-----------------------------------|----------------------------------------------|
| Color / Material | White / Aluminum Bubble: Hard-coated dome |
| RAL Code | RAL9003 |
| Product Dimensions / Weight | ø160x72mm(ø6.30x2.83"), 1170g(2.58 lb) |
| Compatible Conduit hole / Gangbox | single, double, 4" octagon, 4" square |
| Hanging Mount (Dome) | SBP-160HMMW1 |
| Skin Cover | SBC-160BF |
| Backbox | SBV-180BW/180WW |
| Ceiling Mount (Assy) | ='[1]XNV-8082R'!C118 |
| Wall Mount | SBP-300WMW/300WMW1, SBP-390WMW2, SBP-160WMW1 |
| Pole Mount | SBD-180PMW/300PMW2 |
| In-ceiling Mount | SHD-1600FPW/1600FW |
| Parapet Mount | SBP-300LMW, SBP-156LMW1 |
| Corner Mount | SBP-300KMW1 |
| Tilt Mount | SBP-160TMW1 |
| Cabinet | SBP-300NBW |

Certifications & Standards

| | |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EMC | FCC 47 CFR 15 Subpart B Class A ICES-3(A)/NMB-3(A) CE/UKCA - EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3 VCCI CISPR 32 Class A RCM AS/NZS CISPR 32 Class A KS C 9832 Class A, KS C 9835 |
| Safety | UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC 62471 |
| Environment | EN IEC 63000 IEC 60529 IP66, IEC 62262 IK10 NEMA 250 type 4X |

DORI (EN62676-4 standard)

| | |
|---------------------------|-----------------|
| Detect (25PPM/ 8PPF) | 34.9m(114.49ft) |
| Observe (63PPM/ 19PPF) | 13.9m(45.60ft) |
| Recognize (125PPM/ 38PPF) | 7.0m(22.96ft) |
| Identify (250PPM/ 76PPF) | 3.5m(11.48ft) |

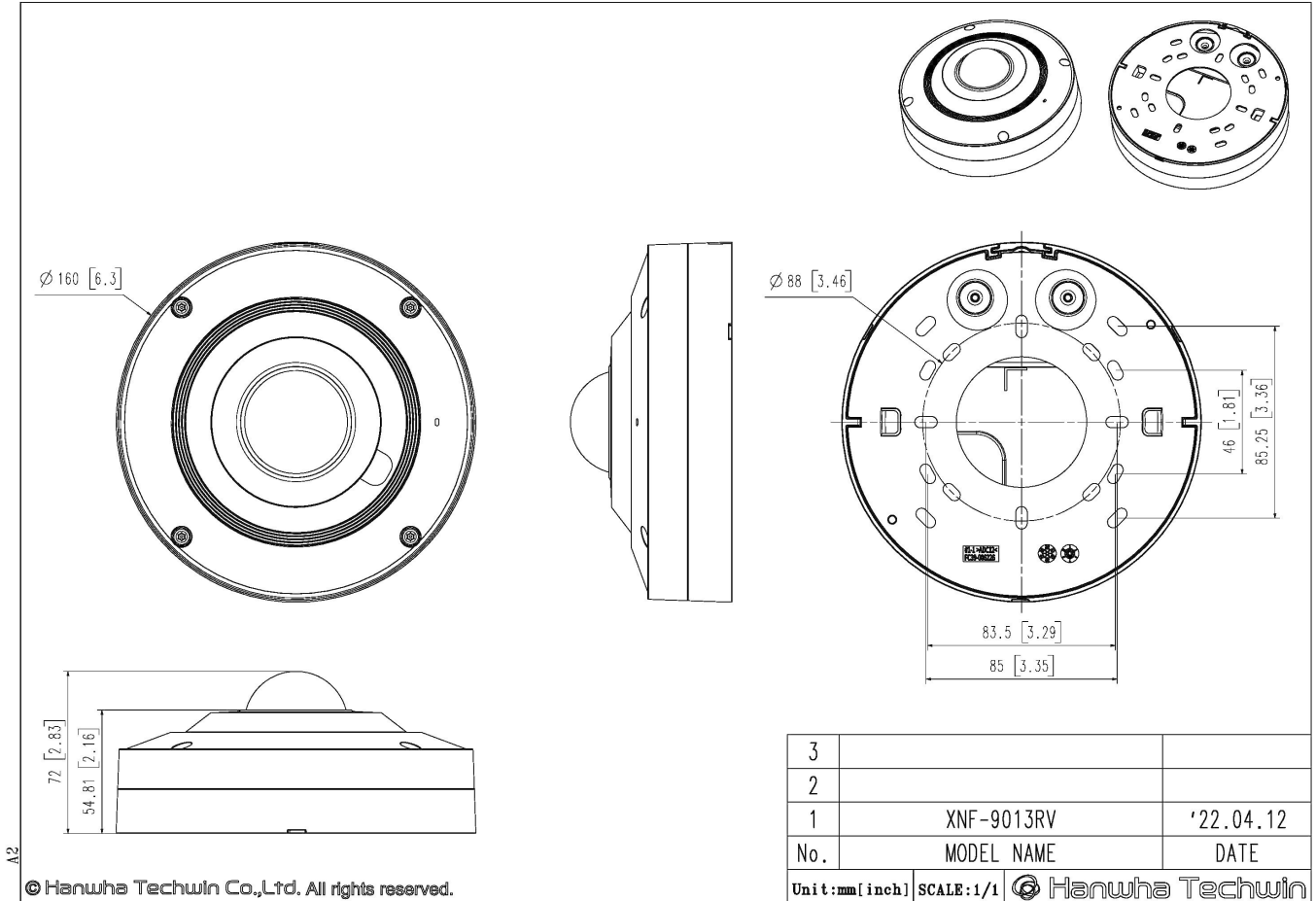
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CAD

Unit:mm [inch]



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