



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)

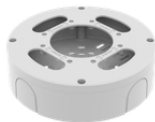
Compatible Devices



SBC-160BF



SBP-160HMW1



SBV-180BW



SBV-180WW



SBP-150CMI



SBP-300CMI



SBP-300CMW1



SBP-900CMW



SBP-300CMTW



SBP-300CMTS



SBP-300WMW



SBP-300WMW1



SBP-390WMW2



SBP-160WMW1

XNF-9013RV

12MP AI IR Fisheye Camera



Specifications

| Video | | |
|-------------------------------|--|------------------------|
| Imaging Device | Size | 1/2.3" |
| | Type | CMOS |
| Resolution | 3584x2688, 3584x1792, 3584x896, 3008x3008, 1920x960, 1920x480, 1792x1344, 1792x896, 1504x1504, 1080x1080, 1024x768, 960x960, 800x600, 768x768, 720x720, 704x576, 640x640, 640x480, 640x320, 640x160, 480x480 | |
| Max. Framerate | H.265/H.264 | 30fps/25fps(60Hz/50Hz) |
| | MJPEG | 30fps(@9MP Max. 5fps) |
| Min. Illumination (Lux) | Color(1/30sec, 30IRE) | 0.39 |
| | BW(1/30sec, 30IRE) | 0.039 |
| Video Out | CVBS: 1.0 Vp-p / 75Ω composite for installation. USB: Micro USB Type B | |
| Lens | | |
| Focal Length (mm) | 1.08 | |
| Max Aperture Ratio (F number) | Wide | 2.2 |
| Angular Field of View | Horizontal | 187° |
| | Vertical | 187° |
| | Diagonal | 187° |
| Min. Object Distance | 0.5m(1.64ft) | |
| Focus Control | Simple focus | |
| Pan / Tilt / Rotate | | |
| Pan / Tilt / Rotate Range | Rotate | Lens rotation |
| Operational | | |
| Day & Night | Auto(ICR) | |
| Backlight Compensation | BLC, HLC, WDR, SSSR | |
| Wide Dynamic Range (dB) | 120 | |
| Digital Noise Reduction | WiseNR II (Based on AI engine), SSNR V | |
| Motion Detection | Quantity | 8ea |
| | Shape | 8point Polygonal zones |

Operational

| | | |
|--|----------------|--|
| Privacy Masking | Quantity | 32ea |
| | Shape | 4point Quadrangle zones |
| | Color / Option | Gray, Green, Red, Blue, Black, White, Mosaic |
| Gain Control | | Off, Max gain, Manual |
| White Balance | | ATW, NarrowATW, AWC, Manual, Indoor, Outdoor |
| Electronic Shutter | Mode | Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine) |
| | Speed Range | 1/5~1/12,000sec |
| Video Rotation | | Flip, Mirror |
| Alarm Interface | In/Out | 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 |
| Light Type | | IR LED |
| Light Viewable Length | IR | WiseIR 8m(26.25ft)(PoE), 13m(42.65ft)(PoE+) |
| IR Wavelength | | 850nm |

Analytics

| | | |
|------------------------|--------------------|--|
| Classified Object Type | | Person, Face, Vehicle, License plate |
| Attributes | Vehicle | Type(car, bus, truck, motorcycle, bicycle) |
| Thumbnail | | DetectionShot |
| Analytics Events | Based on AI Engine | Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Motion detection |
| | Normal | Defocus detection, Tampering, Fog detection, Audio detection, Sound classification, Virtual area(Appear/Disappear) |
| Business Intelligence | Based on AI Engine | People counting, Queue management, Heatmap, Vehicle counting |

Network

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|-------------------|--|---|
| 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, WiseStreamIII |
| Bitrate Control | | H.265/H.264: CBR or VBR, MJPEG: VBR |

Network

| | | |
|-----------------------------------|--------------------|---|
| 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 |
| 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 | |
| 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(Trusted platform module), HTPM(Hanwha Trusted Platform Module), SDcard partition encrypt(AES-256) | |
| Security Certificate | TPM 2.0 with FIPS 140-2 level2 | |

General

| | | |
|--------------|--------------------|-------------------------------|
| Memory | RAM | 4GB |
| | Flash | 512MB |
| Edge Storage | Micro SD/SDHC/SDXC | Max. 512GB x 2slot(Total 1TB) |

Environmental & Electrical

| | | |
|---------------------|-------------|--|
| Operating Condition | Temperature | -40°C~+60°C(-40°F~+140°F) |
| | Humidity | 0~95% RH(non-condensing) |
| Storage Condition | Temperature | -50°C~+60°C(-58°F~+140°F) |
| | Humidity | 0~90% RH(non-condensing) |
| Input Voltage | | PoE(IEEE802.3af, Class3), PoE+(IEEE802.3at, Class4), 12VDC |
| Power Consumption | PoE | PoE mode: Max 12.95W,typical 9.4W, PoE+ mode: Max 23.0W,typical 9.4W, |
| | 12VDC | PoE mode: Max 12.9W,typical 9.0W, PoE+ mode: Max 22.0W,typical 9.0W |

Mechanical

| | |
|-------|-------|
| Color | White |
|-------|-------|

Mechanical

| | |
|---------------------|------------------------------------|
| Material | Aluminum |
| RAL Code | RAL9003 |
| Product Dimensions | ø160x72mm(ø6.30x2.83") |
| Product Weight | 1170g(2.58 lb) |
| Compatible Gang Box | Single, Double, 4" Octagon, Square |

Certifications & Standards

| | |
|-------------|--|
| EMC | FCC 47 CFR 15 Subpart B Class A, ICES-3(A)/NMB-3(A), CE/UKCA - EN55032 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 | IEC/EN 63000, IEC 60529 IP66, IEC 62262 IK10, NEMA 250 type 4X |

DORI (EN62676-4 standard)

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

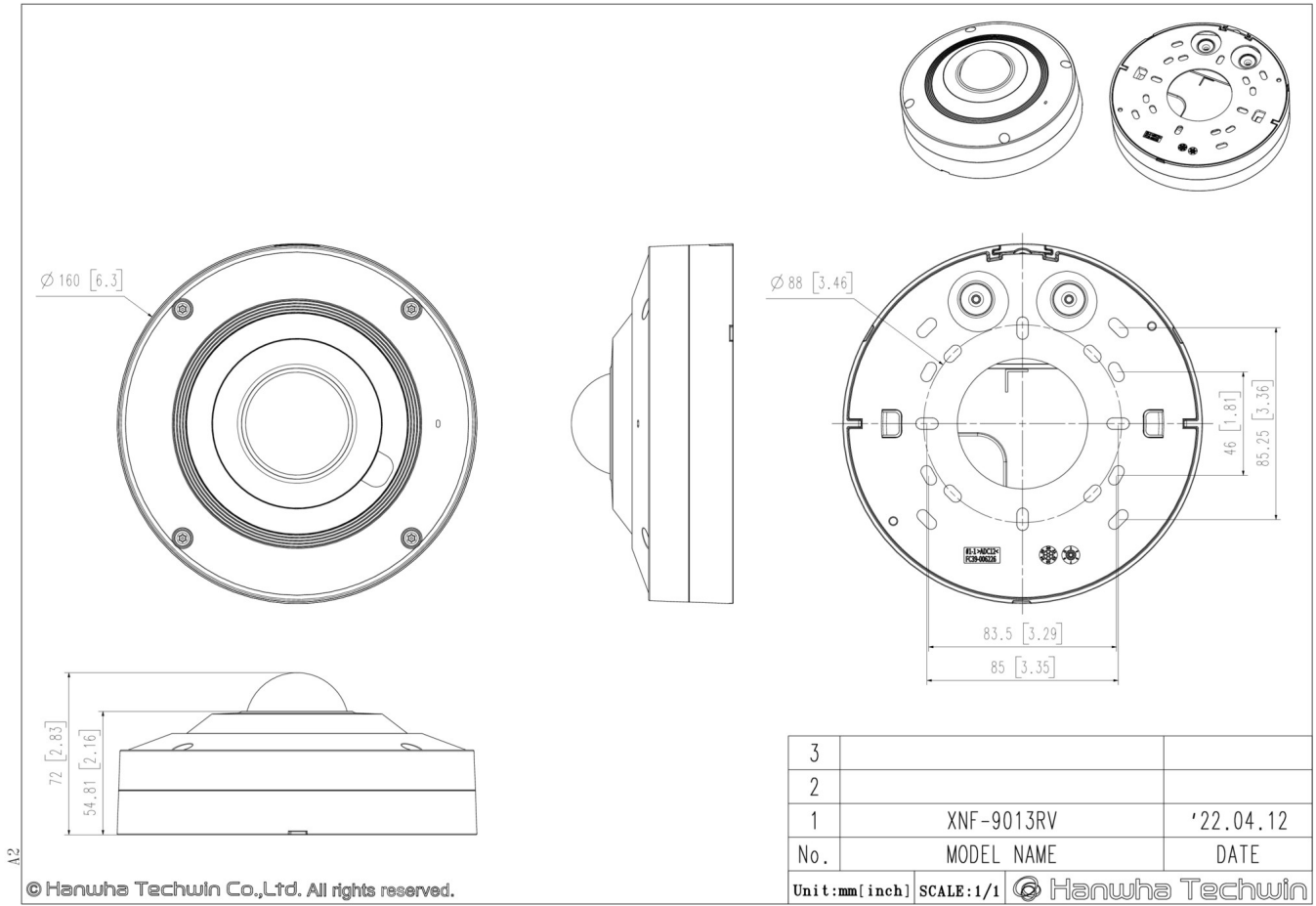
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CAD

Unit: mm [inch]



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