



Key Features

- 4K resolution
- 2.8~8.4mm(3x) motorized Varifocal
- 0.05Lux@F1.2 (Color), 0Lux (B/W, IR LED on)
- Max.30fps@4K (H.265/H.264)
- IR viewable length 40m
- Day & Night (ICR), extreme WDR (120dB)
- DIS with built-in Gyro sensor
- Video Analytics
 - Defocus, Directional detection
 - Audio detection
 - Shock detection
 - Face/Upper body detection)
- Dual SD slots (Max. 1TB)
- Modular structure, PoE support
- IP66/IP67/IP6K9K, IK10+, NEMA4X

Specifications

Video	
Imaging Device	1/2.8" CMOS
Resolution	3840x2160, 3328x1872, 3072x1728, 2592x1944, 2688x1520, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps(@8MP Max. 5fps)
Min. Illumination	Color: 0.05Lux(F1.2, 1/30sec, 30IRE) BW: 0.005Lux(F1.2, 1/30sec, 30IRE), 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)	2.8~8.4mm(3x) motorized varifocal
Max. Aperture Ratio	F1.2(Wide)~F2.8(Tele)
Angular Field of View	H: 114°(Wide)~40°(Tele) V: 62°(Wide)~22°(Tele) D: 133°(Wide)~46°(Tele)
Min. Object Distance	0.7m(2.23ft)
Focus Control	Simple focus
Lens Type	DC Auto Iris, P iris
Pan / Tilt / Rotate	
Pan / Tilt / Rotate Range	0°~360° / 0°~85° / 0°~355°
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	SSNR V
Digital Image Stabilization	Support(built-in gyro sensor)
Defog	Support
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
LDC	Support(Fill/stretch mode)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker(2~1/12,000sec) Prefer shutter control
Video Rotation	Flip, Mirror, Hallway view(90°/270°)
Analytics	Analytics events - Defocus detection, Directional detection, Motion detection, Digital auto tracking, Appear/Disappear, Enter/Exit, Loitering, Tampering, Fog detection, Virtual line, Audio detection, Sound classification, Shock detection, Face/upper body detection
Business Intelligence	People 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)
Audio Out	Line out
IR Viewable Length	WiselR 40m(131.23ft)
Network	
Ethernet	Metal shielded RJ-45(10/100/1000BASE-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), WiseStream II
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 10 profiles, 3 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 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	HTPM(Hanwha trusted platform module), SDcard partition encrypt
Security Certificate	CyberSecurity assurance program UL CAP(UL 2900-2-3 L2)
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	-50°C~+60°C(-58°F~+140°F) / 0~95% RH(non-condensing) * Start up should be done at above -30°C
Storage Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) / 0~90% RH
Certification	IP66/IP67/IP6K9K, IK10+, NEMA4X
Input Voltage	PoE(IEEE802.3af, class3), 12VDC
Power Consumption	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9.0W 24VAC: Max 13.5W, typical 11.0W Power redundancy failover

Mechanical	
Color / Material	White / Aluminum Bubble: Hard-coated dome
RAL Code	RAL9003
Product Dimensions / Weight	ø180x125mm(ø7.09x4.92"), 1900g(4.19 lb)
Compatible Conduit hole / Gangbox	19.1mm(3/4")(M25) single, double, 4" octagon, 4" square
Hanging Mount (Dome)	SBP-180HMW1
Backbox	SBV-180BW, SBV-180WW
Ceiling Mount (Assy)	SBP-150CMI/300CMI, SBP-300CMW1/900CMW, SBP-300CMTW, SBP-300CMTS
Wall Mount	SBP-300WMW/WMW1, SBP-390WMW2
Pole Mount	SBD-180PMW, SBP-300PMW2
In-ceiling Mount	SHD-1350FPW
Parapet Mount	SBP-300LMW, SBP-156LMW1
Corner Mount	SBP-300KMW1
Cabinet	SBP-300NBW
Other Compatible Models	SPB-VAN85W

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 60950-1, CAN/CSA C22.2 NO. 60950-1 IEC 62471
Environment	EN IEC 63000 IEC 60529 IP66/IP67, ISO 20653 IP6K9K, IEC 62262 IK10+ NEMA 250 type 4X

DORI (EN62676-4 standard)	
Detect (25PPM/ 8PPF)	Wide: 49.9m(163.63ft) / Tele: 211.0m(692.28ft)
Observe (63PPM/ 19PPF)	Wide: 19.9m(65.45ft) / Tele: 84.4m(276.91ft)
Recognize (125PPM/ 38PPF)	Wide: 10.0m(32.73ft) / Tele: 42.2m(138.46ft)
Identify (250PPM/ 76PPF)	Wide: 5.0m(16.36ft) / Tele: 21.1m(69.23ft)

Dimensions

Unit: mm [inch]

