

CCTV IP / Professional IP cameras

SF-IPT998ZWA-8P-HV

Artificial Intelligence IP Camera

Motion Detection 2.0 PRO Series

Motion Detection 2.0 allows to differentiate between alarms produced by humans or vehicles, ignoring irrelevant elements. Traditionally, motion detection occurred by "pixel shifting", but this leads to false alarms due to heavy rain or movement of trees. The working mode allows a quick search of targets both in software and Safire NVR, classifying the detection as a human or a vehicle. PRO Series counts with a high-quality sensor which obtains the best result with 0 Lux through Smart IR light and Digital Noise Reduction 3D-DNR. Although offers a wide Dynamic range (WDR) of 120 dB to obtain better image quality with high light contrast or backlighting.

- 8 Megapixels Resolution
- 1/2.8" Progressive Scan CMOS
- Motorized Lens 2.8~12 mm Autofocus
- H.265+ High Efficiency Video Codec
- Motion Detection 2.0
- WDR Wide dynamic range and Smart IR LED Up to 40



Technical Specification

Image Sensor	1/2.8" Progressive Scan CMOS
Min. Illumination	Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR
Shutter Speed	1/3 s to 1/100,000 s
Slow Shutter	Yes
P/N	P/N
Wide Dynamic Range	120 dB
Day & Night	IR cut filter
Angle Adjustment	Pan: 0° to 360°, tilt: 0° to 75°, rotate: 0° to 360°
Lens Type	Varifocal lens, motorized lens, 2.8 to 12 mm
Focal Length & FOV	2.8 to 12 mm, horizontal FOV 108° to 30°, vertical FOV 56° to 17°, diagonal FOV 131° to 35°
Lens Mount	Ø14
Iris Type	Fixed
Aperture	F1.6
DORI	2.8 to 12 mm: D: 97 m to 290 m, O: 38 m to 115 m, R: 19 m to 58 m, I: 9 m to 29 m
Supplement Light Type	IR
Smart Supplement Light	Yes
IR Wavelength	850 nm
IR Range	Up to 40 m
Max. Resolution	3840 × 2160
Main Stream	50 Hz: 20 fps (3840 × 2160) 25 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720) 60 Hz: 20 fps (3840 × 2160) 30 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)
Sub Stream	50 Hz: 25 fps (640 × 480, 640 × 360) 60 Hz: 30 fps (640 × 480, 640 × 360)
Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) *Third stream is supported under certain settings.
Video Compression	Main stream: H.265/H.264/H.264+/H.265+ Sub-stream: H.265/H.264/MJPEG Third stream: H.265/H.264 *Third stream is supported under certain settings.
Video Bit Rate	32 Kbps to 16 Mbps
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main Profile
H.264+	Main stream supports
H.265+	Main stream supports
Bit Rate Control	CBR/VBR

Scalable Video Coding (SVC)	H.264 and H.265 encoding
Region of Interest (ROI)	1 fixed region for main stream and sub-stream
Audio Compression	G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC
Audio Bit Rate	64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/16 Kbps to 64Kbps (AAC)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
Environment Noise Filtering	Yes
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP
Simultaneous Live View	Up to 6 channels
API	Open Network Video Interface (Profile S, Profile G), ISAPI, SDK
User/Host	Up to 32 users. 3 user levels: administrator, operator and user
Security	Password protection, complicated password, HTTPS encryption, IP address filter, Security Audit Log, basic and digest authentication for HTTP/HTTPS, TLS 1.1/1.2, WSSE and digest authentication for Open Network Video Interface
Network Storage	NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
Client	Safire Control Center, Safire Connect, Safire Central
Web Browser	Plug-in required live view: IE 10, IE 11 Plug-in free live view : Chrome 57.0+, Firefox 52.0+ Local service: Chrome 57.0+, Firefox 52.0+
Image Parameters Switch	Yes
Image Settings	Rotate, mirror, privacy mask, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser
Day/Night Switch	Day, Night, Auto, Schedule
Image Enhancement	BLC, HLC, 3D DNR
SNR	≥ 52 dB
Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
On-board Storage	Built-in memory card slot, support micro SD card, up to 256 GB
Audio	1 input (line in), two-core terminal block, max. input amplitude: 3.3 Vpp, input impedance: 4.7 K Ω , interface type: non-equilibrium 1 output (line out), two-core terminal block, max. output amplitude: 3.3 Vpp, output impedance: 100 Ω , interface type: non-equilibrium
Alarm	1 input, 1 output (max. 24 VDC/24 VAC, 500 mA)
Hardware Reset	Yes
Basic Event	Motion detection (human and vehicle targets classification), video tampering alarm, exception
Face Detection	Yes
Perimeter Protection	Line crossing detection, intrusion detection Supports human and vehicle targets classification
Linkage Method	Upload to FTP/memory card/NAS, notify surveillance center, trigger recording, trigger capture, send email
Camera Material	Aluminum alloy body

Camera Dimension	Ø138.3 mm × 126 mm (Ø5.5" × 5.0")
Package Dimension	216 mm × 121 mm × 118 mm (8.5" × 4.8" × 4.6")
Camera Weight	Approx. 830 g (1.8 lb.)
With Package Weight	Approx. 1160 g (2.6 lb.)
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Web Client Language	33 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
General Function	Anti-flicker, heartbeat, password reset via email, pixel counter
Firmware Version	V5.5.113
Software Reset	Yes
Power Consumption and Current	12 VDC, 0.92 A, max. 11.04 W PoE (802.3af, 36 V to 57 V), 0.35 A to 0.22 A, max. 12.5 W
Power Supply	12 VDC ± 25%, reverse polarity protection PoE: 802.3af, Class 3
Power Interface	Ø5.5 mm coaxial power plug
EMC	FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 6, 2016); KC (KN 32: 2015, KN 35: 2015)
Safety	UL (UL 60950-1); CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013); CE-LVD (EN 60950-1:2005 + Am 1:2009 + Am 2:2013)
Environment	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)
Protection	IP67 (IEC 60529-2013), IK10 (IEC 62262: 2002)