

CCTV IP / Professional IP cameras

# SF-IPT833WA-4P-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.

- 4 Megapixels Resolution
- 1/3" Ultra Low Light CMOS Sensor
- 2.8 mm Fixed Lens
- H.265+ High Efficiency Video Codec
- Built-in Mic and WDR Wide dynamic range
- Motion Detection 2.0
- Human and Vehicle classification
- Advanced Smart detection rules (VCA)



## Technical Specification

<b>Image Sensor</b>	1/3 Progressive Scan CMOS
<b>Max. Resolution</b>	2688 × 1520
<b>Min. Illumination</b>	Color: 0.005 Lux @ (F1.6, AGC ON), 0 Lux with IR on
<b>Shutter Time</b>	1/3 s to 1/100,000 s
<b>Day &amp; Night</b>	IR cut filter
<b>Angle Adjustment</b>	Pan: 0° to 360°, tilt: 0° to 75°, rotate: 0° to 360°
<b>Focal Length &amp; FOV</b>	Horizontal FOV 103°, vertical FOV 55°, diagonal FOV 122°
<b>Lens Mount</b>	M12
<b>Iris Type</b>	Fixed
<b>Aperture</b>	F1.6
<b>DORI</b>	2.8 mm: D: 67 m, O: 26 m, R: 13 m, I: 6 m
<b>Supplement Light Type</b>	IR
<b>Supplement Light Range</b>	Up to 30 m
<b>Smart Supplement Light</b>	Yes
<b>IR Wavelength</b>	850 nm
<b>Main Stream</b>	50Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720) 60Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)
<b>Sub-Stream</b>	50Hz: 25 fps (640 × 480, 640 × 360) 60Hz: 30 fps (640 × 480, 640 × 360)
<b>Third Stream</b>	50Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360) 60Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360)
<b>Video Compression</b>	Main stream: H.265/H.264/H.264+/H.265+ Sub-stream: H.265/H.264/MJPEG Third stream: H.265/H.264
<b>Video Bit Rate</b>	32 Kbps to 8 Mbps
<b>H.264 Type</b>	Baseline Profile/Main Profile/High Profile
<b>H.265 Type</b>	Main Profile
<b>Bit Rate Control</b>	CBR/VBR
<b>Scalable Video Coding (SVC)</b>	H.264 and H.265 encoding
<b>Region of Interest (ROI)</b>	1 fixed region for main stream and sub-stream
<b>Audio Compression</b>	G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC
<b>Audio Bit Rate</b>	64Kbps(G.711ulaw/G.711alaw)/16Kbps(G.722.1)/16Kbps(G.726)/16Kbps-64Kbps(AAC)/32-192Kbps(MP2L2)/8-320Kbps(MP3)
<b>Audio Sampling Rate</b>	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
<b>Environment Noise Filtering</b>	Yes
<b>Protocols</b>	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS, PPPoE
<b>Simultaneous Live View</b>	Up to 6 channels
<b>API</b>	Open Network Video Interface (Profile S, Profile G), ISAPI, SDK
<b>User/Host</b>	Up to 32 users. 3 user levels: administrator, operator and user
<b>Security</b>	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
<b>Network Storage</b>	MicroSD/SDHC/SDXC card (256 GB) local storage, and NAS(NFS, SMB/CIFS), auto network replenishment (ANR)

<b>Client</b>	Safire Control Center, Safire Connect, Safire Central
<b>Web Browser</b>	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+
<b>Image Parameters Switch</b>	Yes
<b>Image Settings</b>	Rotate, mirror, privacy mask, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser
<b>Day/Night Switch</b>	Day, Night, Auto, Schedule
<b>Wide Dynamic Range (WDR)</b>	120 dB
<b>SNR</b>	≥ 52 dB
<b>Image Enhancement</b>	BLC, HLC, 3D DNR
<b>Ethernet Interface</b>	1 RJ45 10M/100M self-adaptive Ethernet port
<b>On-Board Storage</b>	Built-in micro SD, up to 256 GB
<b>Built-in Microphone</b>	Yes
<b>Reset Key</b>	Yes
<b>Basic Event</b>	Motion detection (human and vehicle targets classification), video tampering alarm, exception
<b>Smart Event</b>	Line crossing detection, intrusion detection (support alarm triggering by specified target types (human and vehicle)) Face detection
<b>Linkage</b>	Upload to FTP/memory card/NAS, notify surveillance center, trigger record, trigger capture, Email
<b>Power</b>	12 VDC ± 25%, 0.5 A, max. 6 W, Ø5.5 mm coaxial power plug, reverse polarity protection PoE: 802.3af, Class 3, 36 V to 57 V, 0.19 A to 0.12 A, max. 7 W
<b>Dimension</b>	Ø127.3 × 95.9 mm (Ø5.01" × 3.78")
<b>Package Dimension</b>	150 × 150 × 141 mm (5.9" × 5.9" × 5.6")
	Approx. 600 g (1.3 lb.)
<b>With Package Weight</b>	Approx. 816 g (1.8 lb.)
<b>Storage Conditions</b>	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
<b>Startup and Operating Conditions</b>	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
<b>Language</b>	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
<b>General Function</b>	Anti-flicker, heartbeat, password reset via e-mail, pixel counter
<b>EMC</b>	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)
<b>Safety</b>	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); BIS (IS 13252(Part 1):2010+A1:2013+A2:2015)
<b>Environment</b>	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)
<b>Protection</b>	IP67 (IEC 60529-2013)