

CCTV IP / Thermal

SF-IPTB012DA-10D4-256

Thermographic Bi-Spectrum Camera

Bi-Spectrum Thermographic Cameras

High-resolution thermal imaging cameras are used to detect temperature anomalies before a fire starts, find hot spots, invisible defects in machinery or electrical systems that could indicate a potential problem. The artificial intelligence they incorporate also allows them to detect humans and/or vehicles, filtering out possible false alarms caused by vegetation, animals, etc. Its visible spectrum lens will allow us to obtain a high quality image with more information for alarm verification in the surveillance centre.

- 256x192 Thermal VOx & Sensor 4Mpx Optical
- 9.7mm Thermal / 8mm Optical Lens
- Accuracy $\pm 8^{\circ}\text{C}$
- Powerfull behavior analysis and Temp. Measure
- IP67 protection / Audio / Alarm
- Power supply PoE 802.3af



Technical Specification

Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	256 × 192
Pixel Pitch	12 μm
Spectral Range	8 μm to 14 μm
NETD	< 40 mK (25°C, F1.0)
Focal Length	9.7 mm
IFOV	1.24 mrad
Field of View	18.0°(H) x13.5°(V)
Min. Focusing Distance	3.5 m
Aperture	F1.0
Digital Zoom	×2, ×4
Image Sensor	1/2.7" Progressive Scan CMOS
Resolution	2688 × 1520
Min. Illumination	Color: 0.0176 Lux @ (F2.25, AGC ON), B/W: 0.0035 Lux @ (F2.25, AGC ON)
Shutter Speed	1 s to 1/100,000 s
Focal Length	8.0 mm
Field of View	39.4°(H) x22.1°(V)
Aperture (Range)	F1.6
WDR	120 dB
Target Coloration	Yes. Supported in white hot and black hot mode.
IR Distance	Up to 30 m
IR Intensity and Angle	Automatically adjusted
White Light Range	Up to 30 m
Visual Alarm	Yes. White light alarm with adjustable flashing frequencies
Audio alarm	Yes, for two types of audible alarm (VCA and Temperature Exception) 2 preset voice alerts (one for each) 6 importable user-defined voice alerts (6 options shared in the two types)
VCA	4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total.
Temperature Measurement	3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line)
Temperature Range	-20°C to 150°C (-4°F to 302°F)
Temperature Accuracy	± 8°C (± 14.4°F)
Main Stream	Thermal: 25 fps (1280 × 720, 704 × 576, 640 × 512, 320 × 240) Optical: 50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720) 60Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)
Sub-stream	Thermal: 25 fps (704 × 576, 640 × 512, 320 × 240) Optical: 50 Hz: 25 fps (704 × 576, 352 × 288) 60 Hz: 30 fps (704 × 480, 352 × 240)
Video Compression	Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG
Audio Compression	G.722.1/G.711 ulaw/G.711 alaw/MP2L2/G.726/PCM
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour, SFTP, SRTP
Network Storage	MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)
API	ISAPI, Safire SDK, and third-party management platform, Open Network Video Interface (Profile S, Profile G)
Simultaneous Live View	Up to 20 channels
User/Host level	Up to 32 users, 3 levels: Administrator, Operator, User
Security	User authentication (ID and Password), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering

Client	Safire Control Center, Safire Connect
Web Browser	Live view (plug-in allowed) : Internet Explorer 11 Live view (plug-in free) : Chrome 57.0 +, Firefox 52.0 + Local service : Chrome 57.0 +, Firefox 52.0 +
Alarm Input	2, alarm input (0-5 VDC)
Alarm Output	2, alarm output (alarm response actions configurable)
Alarm Action	SD recording/Relay output/Smart capture/FTP upload/Email linkage
Audio Input	1, 3.5 mm Mic in/Line in interface Line input: 2 to 2.4 V [p-p], output impedance: 1 K Ω \pm 10%
Audio Output	Linear level, impedance: 600 Ω
Communication Interface	1, RJ45 10 M/100 M Self-adaptive Ethernet interface. 1, RS-485 interface (half duplex)
Analog Output	1.0V [p-p]/75 Ω , PAL/NTSC/BNC
Web Client Language	32 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)
Power Supply	12 VDC \pm 25%, \square 5.5 mm coaxial power plug PoE (802.3af, class 3)
Power Consumption	12 VDC \pm 25%: 0.5 A, Max. 6 W PoE (802.3af, class 3): 42.5 V to 57 V, 0.14 A to 0.22 A, Max. 6.5 W
Working Temperature/Humidity	Temperature: -40°C to 65°C (-40°F to 149°F) Humidity: 95% or less
Protection Level	IP67 Standard TVS 6000V lightning protection, surge protection, voltage transient protection
Dimensions	321.3 mm \times 106.1 mm \times 107.0 mm (12.65" \times 4.18" \times 4.21")
	1550 g (3.41 lb)