

# SN-D2P-F

Bi-spectrum Compact Network Camera



## Key Features

- 256 × 192 (the resolution of output image is 704 × 576 resolution)
- Support 3 temperature measurement rule types (spot, line, area)
- Temperature range: -20°C to 150°C (-4°F to 302°F) or 0 °C to 550 °C (32°F to 1022 °F)
- Temperature accuracy: ±2°C, ±2%
- Reliable temperature exception alarm function
- Built-in warm light and microphone
- Magnet mount for power distribution cabinet
- IP67 rated

## Specifications

Camera		
	Thermal	Visible
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays	1/2.8" 2MP STARVIS CMOS
Max Resolution	Sensor is 256(H) × 192(V) , Image can be scaled up to 704 × 576	1600(H) × 1200(V)
Pixel Pitch	12µm	N/A
Spectral Range	8 to 14µm	N/A
NETD	≤ 60mK	N/A
Shutter Speed	N/A	1/5 to 1/20,000s
Min Illumination	N/A	Color: 0.05Lux @(F2.2, AGC ON), B/W: 0.005Lux @(F2.2, AGC ON), 0Lux with illuminator on
Day & Night	N/A	Fixed filter
Lens		
	Thermal	Visible
Lens Type	Fixed lens	Fixed lens
Focal Length	2 mm	2.3 mm
Max. Aperture	F1.1	F2.2
Field of View (FOV)	H: 90°, V: 65°	H: 100°, V: 75°
Focus Control	Fixed	Fixed
Illuminator		
Type	White light	
Distance	-0.3 m distance: 0.8×0.8 m, -1 m distance: 1.8×1.2 m	
Control	Auto/Manual	
Intelligent Analytics		
	Thermal	Visible
Smoke and Flame Detection	N/A	Supported
Smoking Detection	Supported	N/A
Fire Spot Detection	Supported	N/A
Video & Audio		
	Thermal	Visible
Main Stream	D1 (704×576)	1600×1200, 1280×720

Sub Stream	CIF, 256×192	D1, VGA, 640×360, CIF, QVGA
Frame Rate	Up to 25fps	Up to 25fps
Bit Rate Control	CBR/VBR	CBR/VBR
Bit Rate	Main Stream: 100 Kbps to 6 Mbps, Sub Stream: 10 Kbps to 1.5 Mbps	Main Stream: 100 Kbps to 8 Mbps Sub Stream: 10 Kbps to 6 Mbps
Smart Encoding	Supported	Supported
Region of Interest (ROI)	Off/On (8 areas, Rectangle)	Off/On (8 areas, Rectangle)
Audio Compression	G.711 A-law, G.711 $\mu$ -law, RAW_PCM	G.711 A-law, G.711 $\mu$ -law, RAW_PCM
Audio Bit Rate	64 Kbps (G.711), 128 Kbps (RAW_PCM)	64 Kbps (G.711), 128 Kbps (RAW_PCM)

### Image

	Thermal	Visible
Image Adjustment	Brightness, Contrast, Sharpness	Brightness, Saturation, Contrast, Sharpness
Scene Mode	Mirror	Indoor, Outdoor, Mirror
Pseudo-color Setting	Up to 17 colors (White-hot / Black-hot / Rainbow / Iron red / HSV / Bone / Cool / Copper / Fire-hot / Pink / Spring / Summer / Autumn / Winter / Jet / Flame / Rose - Bengal)	N/A
FFC Control	Auto / Manual	N/A
Exposure Mode	N/A	Auto, Manual, Shutter priority
White Balance	N/A	Auto / Tungsten / Fluorescent / Daylight / Shadow
Day/Night Setting	N/A	Day mode / Night mode / Time
Noise Reduction	2D/3D DNR	2D/3D DNR
Image Enhancement	N/A	WDR, HLC, BLC, Defog
Wide Dynamic Range	N/A	True WDR 120dB
OSD	Up to 8 OSD	Up to 8 OSD
Gain Control		Auto / Manual
Privacy Masking	Up to 4 areas	Up to 4 areas

### Thermal Function

Temperature Range	-20°C to 150°C (-4°F to 302°F) or 0 °C to 550 °C (32°F to 1022 °F)
Accuracy	$\pm 2^\circ\text{C}$ / $\pm 2\%$
Temperature Detection	3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line). Temperature Measurement Distance (0.1×0.1m): 3 m
Temperature Alarm	Temperature difference alarm, Threshold alarm, Temperature rise alarm
Temperature Display	Display in the lower left corner, follow the cursor display of the highest temperature, lowest temperature or average temperature
Image Fusion	Fusion view of thermal view and overlaid details of the optical channel

### Event

Alarm Triggers	IVS, Motion detection, Alarm input, Network alarm, Disk alarm, Abnormal sound detection
Event Actions	Alarm output, Recording, SMTP, FTP upload, Flashlight alarm, Audible alarm output
<b>Network</b>	
Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPOE, RTSP/RTP/RTCP, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, 802.1x, SNMP, Multicast
Application Programming Interface	ONVIF (Profile S/T/G/M), CGI, SDK
Max Concurrent Streams	10 channels
User/Host Level	32+ users, 3 levels: Administrator, Operator, Media user
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge
<b>Security</b>	
OS / Firmware Protect	Encrypted firmware, Signed firmware
User Authentication	Digest authentication, Prevent brute-force attack
Network Authentication	IEEE 802.1X (EAP-TLS)
Secure Communication	HTTPS, WSS (WebSocket Secure), SRTP
Access Control	IP-based access control, Auto logout
Data Protect	Encryption credentials
Audit	Access / System / Event Log management
Secure Storage	SDcard partition encrypt(AES-256), Secure element
Supply Chain Security	SBOM
<b>Interface</b>	
Network Interface	1 × Ethernet (10/100 Base-T), RJ-45 connector
Built-in Microphone	Supported
Alarm Interface	1ch input, 1ch output
Control Interface	1ch RS-232, 1ch RS-485
SD Card Slot	Support microSD/HCSd card, up to 512GB
Reset Button	Supported
<b>General</b>	
Language	English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English
Power Supply	12 VDC ±20%/PoE (802.3af)
Power Consumption	Max 3 W
Operating Temperature	-30°C to 60°C (-22°F to 140°F)
Operating Humidity	Less than 90% RH
Ingress Protection	IP67

Certifications	CE-EMC - EN 55032, EN IEC 61000-6-4, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130 CE-LVD - EN IEC 62368-1 FCC 47 CFR Part 15 Subpart B
Material	Metal
Dimensions	55 × 118 × 36 mm (2.17 × 4.65 × 1.42 inch)
Net Weight	Without Cable: 0.3 Kg (0.66 lb) With Cable: 0.44 Kg (0.97 lb)

## Dimensions (mm)

