

SN-IPP57/90DDN

32MP Multi-Sensor Panoramic Network Camera



- Four 1/1.8" 8MP Progressive Scan CMOS
- H.265/H.264 triple-stream encoding
- Edge stitching 20fps@5760×3240
- Support 360-degree panoramic view
- Unique De-warping Image
- Support Camera & Software De-warping
- Smart detection
- ROI, Defog, HLC, BLC, AWB, AGC, EIS, IVS
- IP66

System Overview

Sunell's multi-sensor camera provides added flexibility for capturing wide area video surveillance. With four 8MP sensors working in tandem to create a comprehensive 360-degree overview, the camera can replace multiple single-sensor cameras providing a higher return on investment. With the field of view being divided across the four sensors, adjustments can be made to each sensor for contrast and brightness, resulting in a crystal-clear panorama.

Functions

Panoramic

Panoramic cameras provide 180 °, 360 ° full range of video scene, and also provide some de-warp mode to bringing people a new sense of real live and interactive experience.

Intelligent Video System (IVS)

With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides optional standard intelligence at the edge allowing detection of Perimeter, Single Virtual Fences, Double Virtual Fences, Loiter, Multi Loiter, Object Left, Object Removed, Abnormal Speed, Converse, Illegal Parking, Signal Bad.

Environmental

With a temperature range of -30 °C to +60 °C (-22 °F to +140 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. For environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

Smart Encode (H.265+)

Deliver high quality video without straining the network, Smart Encode H.265+ is the optimized implementation of H.265. The Smart H.265+ encoding technology includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing saving of up to 70% of bandwidth and storage when compared with standard H.265.

HEVC (H.265)

H.265 ITU-T VCEG is a new video coding standard. H.265 Following standard developed around the existing video coding standard H.264, some retain the original technology, while some of the relevant technology to improve the new technology uses advanced technology to improve the relationship between the code stream, encoding quality, and the delay between algorithm complexity, optimize settings specific contents include: Improve compression efficiency, improve the robustness and error recovery capabilities, real-time to reduce the delay, reduce channel acquisition time and a random access delay, reduce complexity.

Technical Specification

Camera	
Image Sensor	Four 1/1.8" 8MP Progressive Scan CMOS
Effective Pixels	5760(H)×43240(V)
Scanning System	Progressive
Electronic Shutter	1/5-1/20000s
Min. illumination	Color:0.009Lux@(F1.2,AGC ON) B/W:0Lux@(IR LED ON)
S/N Ratio	≥55dB
IR Range	N/A
IR On/Off Control	N/A
IR LEDs	N/A
Pan/Tilt/Rotation Range	N/A
Lens	
Lens Type	Fixed
Iris	Fixed Iris
Focal Length	2.2mm
F Number	F2.2
Angle of View	360°
Focus Control	Fixed
Close Focus Distance	N/A
Video	
Compression	H.265,H.264,MJPEG
Max. Resolution	Edge stitching 5760×3240
Streaming Capability	3 Streams
Stream / Frame Rate	Stream1: 5760×3240@20fps, 4096×2160/3840×2160/1920×1080 @25fps/30fps Stream2: 3840×2160/1080P/720P/D1 @25fps/30fps Stream3: VGA/CIF/QVGA
Bit Rate Control	CBR/VBR
Bit Rate	Main Stream: 7680×4320: 2048Kbps~16384Kbps Sub Stream: 1024Kbps~8Mbps
Day/Night	Auto / Color / B/W
Image Enhancement	BLC / HLC / Defog / dWDR
White Balance	Auto/Manual
Gain Control	Auto/Manual
Noise Reduction	2D/3D DNR
Electronic Image Stabilization(EIS)	Support
Smart IR	N/A
Mirror	Support

Region of Interest	Support
Motion Detection	Support
Privacy Masking	Support
Video Mode	Full Screen Stretch, 360 degrees panorama, Crystal Ball, Asteroid
Audio	
Compression	G.711
Bit Rate	64kbps (G.711), 128kps (RAW_PCM)
Network	
Protocols:	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTCP/RTP, PPPoE, SMTP, DNS, UPnP, FTP, APR, SNMP
Interoperability	ONVIF
Streaming Method	Unicast
Max. User Access	10 Users
Web Viewer	<ie11, chrome<="" firefox,="" td=""></ie11,>
Management Software	
Smart Phone	IOS, Android(>V4.3)
Intelligence	
IVS	Perimeter, Single Virtual Fences, Double Virtual Fences, Loiter, Multi Loiter, Object Left, Object Removed, Abnormal Speed, Converse, Illegal Parking, Signal Bad,
	Audio Anomaly Detection
Interface	Audio Anomaly Detection
Interface Ethernet	Audio Anomaly Detection 1 Ethernet (10/100 Base-T) RJ-45 Connector
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Ethernet	1 Ethernet (10/100 Base-T) RJ-45 Connector
Ethernet Audio Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC
Ethernet Audio Interface Alarm	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC 1ch Alarm In,1ch Alarm Out
Ethernet Audio Interface Alarm RS485	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC 1ch Alarm In,1ch Alarm Out N/A
Ethernet Audio Interface Alarm RS485 BNC Output	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC 1ch Alarm In,1ch Alarm Out N/A N/A
Ethernet Audio Interface Alarm RS485 BNC Output Reset Button	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC 1ch Alarm In,1ch Alarm Out N/A N/A Support
Ethernet Audio Interface Alarm RS485 BNC Output Reset Button Edge Storage	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC 1ch Alarm In,1ch Alarm Out N/A N/A Support
Ethernet Audio Interface Alarm RS485 BNC Output Reset Button Edge Storage Electrical Power Supply Power	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC 1ch Alarm In,1ch Alarm Out N/A N/A Support Micro SD/SDHC/SDXC slot ,Max 128GB
Ethernet Audio Interface Alarm RS485 BNC Output Reset Button Edge Storage Electrical Power Supply Power Consumption Operating	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC 1ch Alarm In,1ch Alarm Out N/A N/A Support Micro SD/SDHC/SDXC slot ,Max 128GB
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Ethernet Audio Interface Alarm RS485 BNC Output Reset Button Edge Storage Electrical Power Supply Power Consumption Operating Temperature Operating	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC 1ch Alarm In,1ch Alarm Out N/A N/A Support Micro SD/SDHC/SDXC slot ,Max 128GB DC12V/POE+ Starting Temperature: -30°C ~ 60°C (-22°F ~ 140°F) Working Temperature: -40°C ~ 60°C (-40°F ~ 140°F)
Ethernet Audio Interface Alarm RS485 BNC Output Reset Button Edge Storage Electrical Power Supply Power Consumption Operating Temperature Operating Humidity	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC 1ch Alarm In,1ch Alarm Out N/A N/A Support Micro SD/SDHC/SDXC slot ,Max 128GB DC12V/POE+ Starting Temperature: -30°C ~ 60°C (-22°F ~ 140°F) Working Temperature: -40°C ~ 60°C (-40°F ~ 140°F) Less than 90% RH
Ethernet Audio Interface Alarm RS485 BNC Output Reset Button Edge Storage Electrical Power Supply Power Consumption Operating Temperature Operating Humidity Ingress Protection	1 Ethernet (10/100 Base-T) RJ-45 Connector 1ch Audio In,1ch Audio Out, 1ch Built-in MIC 1ch Alarm In,1ch Alarm Out N/A N/A Support Micro SD/SDHC/SDXC slot ,Max 128GB DC12V/POE+ Starting Temperature: -30°C ~ 60°C (-22°F ~ 140°F) Working Temperature: -40°C ~ 60°C (-40°F ~ 140°F) Less than 90% RH IP66
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