

# ICIP-2501HD-IR

2MP 25x Starlight IR PTZ Network Camera



- 1/2.8" 2 Megapixel STARVIST™ CMOS
- Powerful 25x optical zoom
- Max. 50/60fps@1080P
- H.265 & H.264 triple-stream encoding
- Auto tracking and IVS Support
- IR distance up to 656ft
- IP67, IK10, PoE+

## System Overview

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, the ICIP-2501HD-IR provides an all-in-one solution for capturing long distance video surveillance for outdoor applications. Together with infrared illumination up to 656ft with Starlight Technology, the camera is the perfect solution for dark, low light applications. The series combines a day/night mechanical IR cut filter for the highest image quality in variable lighting conditions during the day, and True WDR for applications with direct sunlight or glare.

This PTZ also supports Auto Tracking with IVS Tripwire with Tripwire, Intrusion, Abandoned/Missing support as well as Face Detection, Heat Map. Other features include IP67 and IK10 protection and AC24V/ PoE+ power options.

## Functions

### Wide dynamic range (WDR)

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

### Protection (IP67, IK10, wide voltage)

Supporting  $\pm 25\%$  input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. IP67 is supported by the camera, which makes it suitable for both indoor and outdoor environments. IK10 compliance enables the camera to sustain the equivalent of 5kg (11.02lbs) force.

### Auto-tracking

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically

### Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression

### Intelligent Video Analysis (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 multiple object behaviors such as Tripwire analytics, allowing the camera to detect when a predetermined line has been crossed, ideal for business intelligence, workforce optimization, and actionable intelligence.

### Starlight

For challenging low-light applications, Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

### Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

## Technical Specification

### Camera

Image Sensor	1/2.8" STARVIS™ CMOS
Effective Pixels	1920(H) x 1080(V), 2 Megapixels
RAM/ROM	1024M/128M
Scanning System	Progressive
Electronic Shutter Speed	1/1s~1/30,000s
Minimum Illumination	Color: 0.005Lux@F1.6(30IRE); B/W: 0.0005Lux@F1.6(30IRE); 0Lux@F1.6 (IR on)
S/N Ratio	More than 55dB
IR Distance	Distance up to 200m (656ft)
IR On/Off Control	Auto / Manual
IR LEDs	6

### Lens

Lens Type	4.8mm~120mm			
Max. Aperture	F1.6 ~ F4.4			
Angle of View	H: 62.8° ~ 2.6°			
Optical Zoom	25x			
Focus Control	Auto/Manual			
Close Focus Distance	100mm~ 1000mm			
DORI Distance	Detect	Observe	Recognize	Identify
	1613 m 5292 ft	646 m 2119 ft	323 m 1060 ft	161 m 528 ft

### PTZ

Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -20° ~ 90°, auto flip 180°
Manual Control Speed	Pan: 0.1° ~200° /s; Tilt: 0.1° ~120° /s
Preset Speed	Pan: 240° /s; Tilt: 200° /s
Presets	300
PTZ Mode	5 Pattern, 8 Tour, Auto Pan ,Auto Scan
Speed Setup	Human-oriented focal Length/ speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period
Protocol	ICR-SD, Pelco-P/D (Auto recognition)

### Intelligence

Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly
Auto Tracking	Support
IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection, Heat Map

### Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	1080P(1920×1080)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240)
Frame Rate	Main stream: 1080P/1.3M/ 720P(1~50/60fps)
	Sub stream1: D1/CIF(1 ~ 25/30fps)
	Sub stream2: 1080P/1.3M/720P/D1/CIF (1~25/30fps)

Bit Rate Control	CBR/VBR
Bit Rate	H.265/H.264: 448K ~ 8192Kbps
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / WDR(120dB)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduction	Ultra DNR (2D/3D)
Motion Detection	Support
Region of Interest	Support
Electronic Image Stabilization (EIS)	Support
Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

### Audio

Compression	G.711a/G.711Mu/AAC/G.722/G.726/G.729/ MPEG2-L2
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### Network

Ethernet	RJ-45 (10Base-T/100Base-TX)
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x
Interoperability	ONVIF Profile S&G, CGI
Streaming Method	Unicast / Multicast
Max. User Access	20 users
Edge Storage	NAS (Network Attached Storage), Local PC for instant recording, Micro SD card 256GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android

### Certifications

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4- 2014 UL: UL60950-1+CAN/CSA C22.2.No.60950-1
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### Interface

Video Interface	1 port(BNC, 1.0V[p-p], 75Ω)
Audio Interface	1/1 channel In/Out
RS485	1
Alarm I/O	7/2

### Electrical

Power Supply	AC24V/3A(±25%), PoE+(802.3at)
Power Consumption	17W, 25W(IR On, Heater On)

### Environmental

Operating Conditions	-40° C ~ +60° C (-40° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

### Construction

Casing	Metal
Dimensions	209×337.4mm (8.2"× 13.2")
Net Weight	5.8kg(12.79lb)
Gross Weight	9.1kg(20.06lb)

Accessories

Dimensions (mm/in)

