

## P4-2R(2.8-12) A AI

1T 2MP AI IR Fixed Dome Camera



### Features

- ▶ 1TOPS computing power
- ▶ Supports behavior analysis, crowd flow analysis, target detection, person detection, and object classification
- ▶ Supports backlight adaptation and overcast adaptation
- ▶ 1/2.7" CMOS sensor
- ▶ Software-defined architecture that supports loading and upgrade of algorithms
- ▶ 120 dB super wide dynamic range (WDR), ensuring that both foreground and background objects are clearly identified in environments with sharp light contrast

SuperCoding, reducing the bit rate by 50%

## Technical Specifications

Model		P4-2R(2.8-12)A AI				
Major Specifications						
Main control	Computing power	1 TOPS				
	Memory	DDR3 0.5 GB				
	Flash type	SPI NAND FLASH 512.0 MB				
Camera	Focal length	2.8-12mm				
	Max Aperture	F1.6(W)-F3.1(T)				
	Image sensor	1/2.7" CMOS/2MP 1920(H)*1080(V)				
	Lens aperture type	Fixed iris				
	Angle of view	Horizontal:32°(T) to 96°(W);Vertical:18°(T) to 53°(W)				
	IR range	30m				
	Zoom	Digital zoom:16x; Optical zoom: 4x				
	IR Wavelength	850 nm				
	DORI		D(m)	O(m)	R(m)	I(m)
		W	37.3	15.1	7.5	3.7
		T	160.0	64.5	32.0	16.0
Intelligence						
Target/Body	Target	Target detection/Target attribute recognition				
	Target recognition	Supported				
	Person	Person detection				
Other intelligences	Behavior analysis	Fast movement/Tripwire crossing/Intrusion/Area entry or exit /Loitering				
	Crowd flow analysis	Queue length/Head counting/Crowd flow statistics				
	Defocus	Supported				
	Basic Event	Motion detection/Abandoned object detection/Removed object detection				
	Alarm information	HTTPS certificate expiration/SDK certificate expiration/SDK root certificate expiration/SDK revocation certificate expiration/GB 35114 certificate expiration/802.1X certificate expiration/Log certificate expiration/Network disconnection/Network packet receiving anomaly /Full hard disk/Hard disk removal/Failure to write data to disks /Media stream interrupted/Log saving anomaly/Flash read/write /Temperature sensor fault/Hot swapping of network adapters/Video loss				
Open ecosystem						
Algorithm openness	Open OS	Supported				
Data openness	Data openness	SDK (proprietary protocol)/REST API (proprietary protocol)/GA/T 1400/GB/T 28181 (2011, 2016)/ONVIF Profile S/G/T/M				
Image						
Codec	Video encoding format	MJPEG/H.264/H.265				
	Video encoding channels	Triple streams				
	Intelligent encoding	Extra265/264/SuperCoding				
	Video frame rate	60/50/30/25fps				
Image AI	Scene adaptation	Backlight adaptation/Overcast adaptation				

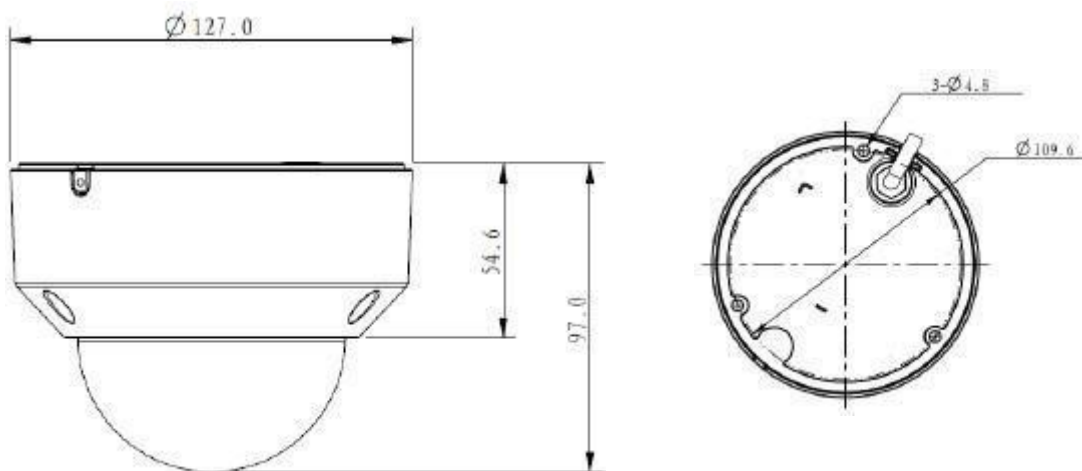
Image ISP	Min illumination	Color: 0.002 lux (F1.6, AGC ON); B/W: 0.001 lux (F1.6, AGC ON) or 0 lux (infrared illuminator enabled)
	Day/Night mode	ICR Day/Night mode: automatic, color, B/W, and scheduled (default: automatic) Trigger mode: image triggered or internal signal triggered (default: image triggered)
	WDR	120dB
	White balance	Auto/Manual/OnePush
	HLC/BLC	Supported/Supported
	Shutter speed	Shutter speed range: 1/100000s to 1/25s Default value in live video mode: 1/25s Default value in target checkpoint mode: 1/25s Default value in micro checkpoint mode: 1/250s Default value in behavior analysis mode: 1/25s
	SNR	>45dB
	Primary stream resolution	1920×1080(1080P),1280×720(720P),720×576(PAL)
	Secondary stream resolution	Secondary stream 1:1920×1080(1080P),1280×720(720P),720×576 (PAL),720×480(NTSC); Secondary stream 2:720×576(PAL),720×480 (NTSC),352×288(PAL),352×240(NTSC)
	Video bit rate	1080p to 4K: 512 kbit/s to 16 Mbit/s 1080p: 256 kbit/s to 16 Mbit/s 720p: 256 kbit/s to 8 Mbit/s D1: 256 kbit/s to 4 Mbit/s CIF: 32 kbit/s to 1 Mbit/s
Digital noise reduction		2D/3D noise reduction
Audio		
Audio	Audio encoding format	G.711a/G.711u/G.726/OPUS/AAC
	Audio sampling rate	G.711a/G.711u/G.726:8K OPUS:8K/12K/16K/24K/48K AAC:8K/16K/22.05K/24K/32K/44.1K/48K
	Audio bit rate	G.711a/G.711u: 64 kbit/s; G.726: configurable (16/24/32/40 kbit/s); OPUS: configurable (16/24/32/40/64/96/128/160/192/224/256/288 kbit/s) AAC: 8 kHz sampling rate: 16/22/24/32/48 kbit/s 16 kHz sampling rate: 24/32/48/64/96 kbit/s 22.05/24/32 kHz sampling rate: 32/48/64/96/128 kbit/s 44.1/48 kHz sampling rate: 48/64/96/128/256 kbit/s
Networking		
Network transmission	Protocols supported by IPv4	TCP, IPv4, UDP, DHCP, DNS, CMP, IGMP, HTTP, HTTPS, FTP, SFTP, RTP, RTSP, RTCP, SIP, ARP, SSL, NTP, SNMP (V1/V2/V3), 802.1X, QoS, SMTP, and PPPoE Note: The northbound protocol should adapt to the PPPoE dialup scenario. Note: 802.1X supports authentication of only one RADIUS service.
	Protocols supported by IPv6	HTTP,HTTPS,RTP,RTCP,RTSP,Onvif,IPv6,ICMPv6,DHCPv6
Web Browser	Web Browser	32- or 64-bit Windows 7, Windows 8, or Windows 10 Google Chrome: 32-bit Google Chrome 38–49 (The IE Tab plug-in must be installed for Google Chrome 46–49.) 32- or 64-bit Google Chrome 50+ Internet Explorer: 32-bit Internet Explorer 10 and 11 Firefox: 32-bit Firefox 35–51 32- or 64-bit Firefox 70+ Microsoft Edge: 32- or 64-bit Microsoft Edge 50+ Restrictions: Compatibility problems may occur on the Firefox browser. (Pages may be out of order for a short time.)
Security		
	Media security	Supports web- or SDK-based media stream encryption; supports a maximum of two channels of encrypted media streams; media stream encryption and full intelligence, target recognition, or image upload through SFTP/FTP cannot be enabled at the same time; after

Data security		the intelligent analysis function is enabled, only one-channel stream encryption is supported; supports encrypted storage of data in SD cards. By default, RTSP uses MD5 digest authentication.
	Video digital watermark	Supported
	Image digital watermark	Supported
Service security	User rights	Three user roles: administrator, advanced operator, and common operator
	Security mode	User name and password authentication, 802.1X authentication, and HTTPS digital certificate
	Secure boot	Supported
	System intrusion detection	Promiscuous network adapter detection; Sensitive system file detection; Unauthorized super account detection; Botnet detection; Rootkit detection; Trusted program detection; Privilege escalation detection

Port	
Storage port	One microSD card slot that supports microSDHC/microSDXC (maximum memory card capacity: 256 GB)
Alarm port	2 input port and 1 output port
Network port	One RJ45 10M/100M adaptive Ethernet port
Communication serial port	RS-485 port
Audio port	Supported (one-channel LINE IN and one-channel built-in microphone)/Supported (one-channel LINE OUT)

General Specifications	
Power type	DC12V, PoE (IEEE 802.3af)
Power consumption	Maximum: 10W, typical: 3.5W
Operating temperature	-30°C to 55°C
Storage temperature	-40°C to 70°C
Operating humidity	5% to 95% (non-condensing)
Surge protection	4kV
IP rating	IP67
Equipment Anti Corrosion	Class C
IK rating	IK10
Weight	Net weight 0.8kg; Gross weight 1kg
Dimensions	Device dimensions $\varphi 127\text{mm} \times 97\text{mm}$ ; Package dimensions $147\text{mm} \times 147\text{mm} \times 112\text{mm}$
Language	Simplified Chinese, English, French, Spanish, Portuguese (Europe), Portuguese (Brazil), Thai, Italian, and Turkish

## Dimensions



## Recommended Accessories



**ACC3311**

Wall-mount bracket  
for fixed dome  
cameras



**ACC3321**

Pendant-mount bracket  
for fixed dome cameras

## HOLLOWITS Contact

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