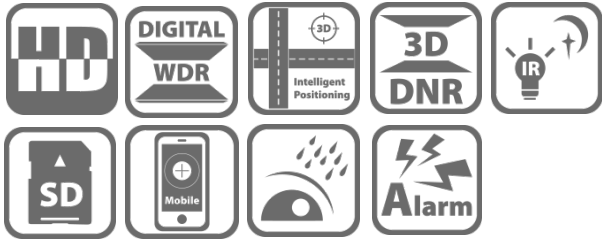




## PNP312-IR 2MP 20X Network IR PTZ Dome Camera



PNP312-IR PTZ Dome Cameras are embedded with 1/2.8" progressive scan CMOS chip, which makes DWDR and 2MP real-time resolution possible. With the 20X optical zoom Day/Night lens, the camera offers more details over expansive areas.

PNP312-IR PTZ Dome Cameras also features a wide range of functions, including intrusion detection, line crossing detection, and audio exception, benefitting users with great improvement on security efficiency, more importantly, with key events / objects being recorded for further forensic needs.

### Key Features

- 1/2.8" Progressive Scan CMOS
- 1920 x 1080
- 20X Optical Zoom
- DWDR
- 3D intelligent positioning function
- Support cloud P2P
- Up to 150m IR distance
- Hi-PoE / 24VAC power supply

## Function Description

### Basic function

- High performance CMOS, up to 1920 x 1080 @30fps resolution.
- Support 960p@60fps, 720p@60fps
- $\pm 0.1^\circ$  Preset Accuracy.
- ONVIF(Open Network Video Interface Forum), CGI(Common Gateway Interface), PSIA(Physical Security Interoperability Alliance), to ensure greater interoperability between different platforms and compatibility.
- 3D intelligent positioning function.
- 3D DNR.
- IP66 standard
- 2 alarm inputs and 1 alarm outputs, alarm linkage support preset, patrol, pattern, recording, relay output, upload center, etc..
- 1 audio input and 1 audio output.

### Smart Function

- Smart image processing: support defog, HLC/BLC.
- Smart codec: low bit rate, ROI.
- Smart detection: support intrusion detection, line crossing detection, audio exception detection.

### Camera function

- Auto iris, auto focus, auto white balance, backlight compensation and auto day & night switch.
- Min. Illumination: Color: 0.05Lux @ (F1.6, AGC ON), B/W: 0.01Lux @ (F1.6, AGC ON), 0 lux with IR.
- Support 8 privacy masks.

### PTZ functions

- 360° endless pan range and -15°-90° tilt range
- 240°/s Pan Preset Speed and 200°/s Tilt Preset Speed
- 0.1°-160°/s Manual Pan Speed and 0.1°-120°/s Manual Tilt Speed
- 300 presets programmable; preset image freezing capability
- 8 patrols, up to 32 presets per patrol Park action.
- Power-off memory: restore PTZ & Lens status after reboot.

### Network function

- H.264/MJPEG video compression.
- H.264 encoding with Baseline/Main/High profile.
- ROI(Region of Interest) encoding.
- Built-in Web server.
- Onboard storage, up to 128GB.
- Support up to 8 NAS storage; Edge recording (transmit the videos from SD card to the NAS after network resumed).
- HTTPS encryption and IEEE 802.1X port-based network access control.
- Support three streams.
- Multiple network protocols supported: IPv4/Ipv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE.

## Specifications

<b>Model</b>	<b>PNP312-IR</b>
<b>Camera Module</b>	
Image Sensor	1/2.8" Progressive Scan CMOS
Min. Illumination	F1.6, AGC On: Color: 0.05 lux, B/W : 0.01lux, 0 lux with IR
Max. Image Resolution	1920 x 1080
Focal Length	4.3-94.0mm, 20x
Digital Zoom	16X
Zoom Speed	Approx.3s(Optical Wide~Tele)
Angle of View	61.4-2.9 degree (Wide~Tele)
Min. Working Distance	10~1,000mm(Wide~Tele)
Aperture Range	F1.6-F3.5
Focus Mode	Auto / Semiautomatic / Manual
DWDR	Support
Shutter Time	1-1/10,000s
AGC	Auto / Manual
White Balance	Auto / Manual /ATW/Indoor/Outdoor/Daylight lamp/Sodium lamp
Day & Night	IR Cut Filter
Privacy Mask	8 privacy masks programmable
Enhancement	3D DNR, Defog, HLC/BLC
<b>Pan and Tilt</b>	
Range	Pan:360° endless; Tilt: -15°~90°(Auto Flip)
Speed	Pan Manual Speed: 0.1°~160°/s, Pan Preset Speed: 240°/s Tilt Manual Speed: 0.1°~120°/s, Tilt Preset Speed: 200°/s
Number of Preset	300
Patrol	8 patrols, up to 32 presets per patrol
Pattern	4 pattern scans, record time over 10 minutes for each scan
Park Action	Preset / Patrol / Pattern / Pan scan / Tilt scan / Random scan / Frame scan / Panorama scan
Scheduled Task	Auto scan / Frame scan / Random scan / Patrol / Pattern / Preset / Panorama scan / Tilt scan / Dome reboot / Dome adjust / Aux output
<b>Features</b>	
Detection	Intrusion detection, Line crossing detection, Audio exception detection, Motion detection
ROI encoding	Support
<b>Infrared</b>	
IR Distance	Up to 150m
IR Intensity	Automatically adjusted, depending on the zoom ratio

<b>Alarm</b>	
Alarm I/O	2/1
Alarm Trigger	Tampering alarm, Network disconnect, IP address conflict, Storage exception
Alarm Action	Preset, Patrol, Pattern, Recording, Relay output, Upload center, Upload FTP, Email linkage
<b>Input/Output</b>	
Audio Input	1 Mic in/Line in interface, line input: 2-2.4V[p-p]; output impedance: 1K $\Omega$ , $\pm$ 10%
Audio Output	1 Audio output interface, line level, impedance: 600 $\Omega$
<b>Network</b>	
Ethernet	10Base-T / 100Base-TX, RJ45 connector
Stream	Support three streams
Main Stream	50Hz:25fps (1920 $\times$ 1080,1280 $\times$ 960,1280 $\times$ 720), 50fps (1280 $\times$ 960,1280 $\times$ 720) ; 60Hz: 30fps(1920 $\times$ 1080,1280 $\times$ 960,1280 $\times$ 720), 60fps (1280 $\times$ 960,1280 $\times$ 720)
Sub Stream	50Hz:25fps(704 $\times$ 576,640 $\times$ 480,352 $\times$ 288);60Hz:30fps(704 $\times$ 480,640 $\times$ 480,352 $\times$ 240)
Three Stream	50Hz:25fps (1920 $\times$ 1080,1280 $\times$ 960,1280 $\times$ 720,704 $\times$ 576,640 $\times$ 480,352 $\times$ 288); 60Hz: 30fps(1920 $\times$ 1080,1280 $\times$ 960,1280 $\times$ 720,704 $\times$ 480,640 $\times$ 480,352 $\times$ 240)
Image Compression	H.264/MJPEG
Audio Compression	G.711ulaw/G.711alaw/G.726/MP2L2/G.722
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
Simultaneous Live View	Up to 20 users
Mini SD Memory Card	Support up to 128GB Micro SD/SDHC/SDXC card. Support Edge recording
User/Host Level	Up to 32 users,3 Levels: Administrator, Operator and User
Security Measures	User authentication (ID and PW); Host authentication (MAC address); IP address filtering
<b>System Integration</b>	
Application programming	Open-ended API, support ONVIF, PSIA and CG , Support cloud P2P
Web Browser	IE 7+, Chrome 18 +, Firefox 5.0 +, Safari 5.02 +
Power	High-PoE&24 VAC, Max.40W
Working Temperature	-30 $^{\circ}$ C ~ 65 $^{\circ}$ C (-22 $^{\circ}$ F ~ 149 $^{\circ}$ F)
Humidity	90% or less
Protection Level	IP66, TVS 4,000V lightning protection, surge protection and voltage transient protection
Certification	FCC, CE, UL, RoHS, IEC/EN 61000, IEC/EN 55022, IEC/EN 55024, IEC /EN60950-1
Dimensions	$\Phi$ 220 $\times$ 353.4mm ( $\Phi$ 8.66" $\times$ 13.91")
Weight (approx.)	4.5kg(9.92lbs)

## Order Models

- PNP312-IR, Hi-PoE, 24VAC, Outdoor

# Dimensions

