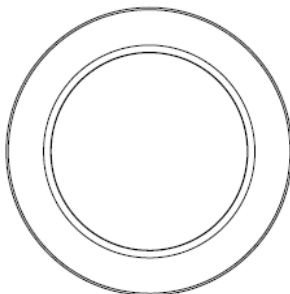
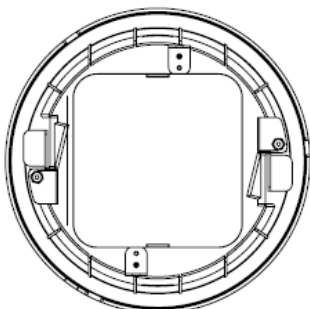
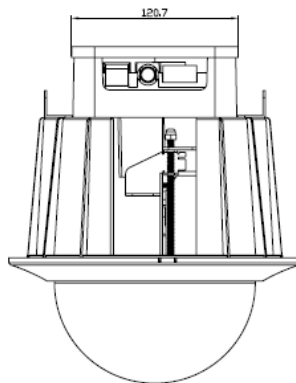
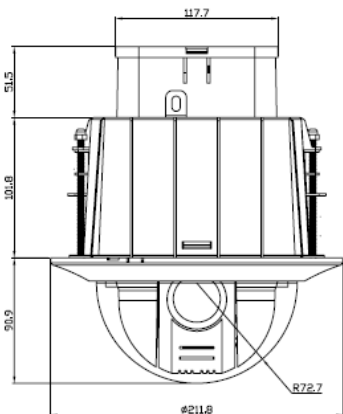


# X20 HD INDOOR IP PTZ CAMERA

PTIN-2012N-DP  
PTIN-2012P-DP



## ● Dimension



## 1. GENERAL FEATURES

- x240 Zoom Control (Optical x20, Digital x12)
- 5.7" Bubble dome enclosure
- Endless 360° Pan Rotation
- Lightning Speed (MAX. 360°/sec) & Smooth Manual Speed (MIN. 0.05°/sec)
- Ultra Low Vibration due to S-curved acceleration & deceleration.
- Day & Night (ICR)
- 1024 Preset Positions with Alphanumeric Labels
- 128 Pattern, 128 Scan and 128 Group Functions
- Power-up Action, Parking Action
- Built-in 2 Sensor Inputs and 1 Relay Output

## 2. PTZ FEATURES

### Micro-Step Technology

Due to the Micro-stepping technology, one step angle is divided by 256. Accordingly, high accuracy as well as ultra low sound noise (under 60dB) can be achieved. Micro-stepping technology enables ultra low speed down to 0.05°/s for high zoom operations.

### Vector Driving

Based on the shortest time and the smallest cost concept, each Pan and Tilt motion is done with simultaneous and harmonious manner by Vector drive technology.

## 3. IP FEATURES

### Real-time High Definition Speed Dome Camera

Using the state of art video compression engine, real time HD video streams of 1080p and 720p can be delivered for recording and monitoring.

### Triple codec, Simultaneous Multi-Streaming

Triple H/W codec enables to transmit Max 3 independent streams with different settings for different requirements. Therefore, it is possible to combine seamless remote video monitoring using H.264 with simultaneous transmission of high quality MPEG-4 to Network Video Recorder. Also, additional MJPEG can be delivered for Mobile devices such as Smart Phone or PDA.

### Local SD Card Backup

Some important sequence of still images can be stored in the SDHC memory card. This action can be configured to work with pre-post-alarm event or a given interval.

## 4. UNIQUE FEATURES

### Virtual Joystick on the Image

Virtual Joystick is inspired by real 3-Axis Joystick. You can decide PT direction by right clicking the image and change the zoom in out by scrolling mouse wheel. The PT speeds are proportional to how much you deviate mouse from the center. Using this function, control of PTZ is done in instinctive manner.

### Auto Map Generation

After installing PTZ, make camera to generate the Scenery Map autonomously. It will process and stitch a series of pictures to make one overall Scenery map. Using Scenery map, you can quickly switch one place to another. By drawing a bow on the map, PTZ will move to the center of the box as well as adjust zoom ratio to match the box.

## Specification

CAMERA	
Image Device	1/2.8" 2.0 Mega Pixel CMOS
Effective Pixels	Approx. 2 Mega pixels
Aspect Ratio	HD: 16:9 SD: 4:3
Zoom	X20 Optical Zoom / X12 Digital Zoom
Focal Length	f = 4.7 ~ 94.0 mm, F1.6 ~ F3.5
Horizontal angle	55.4°(W) ~ 2.9 °(T)
MIN. Illuminance	Color: 1.0 Lux B/W: 0.5 lux
Day & Night	Auto / Day / Night (ICR)
Focus	Auto(Near Limit setting)/ Semi Auto/ Manual
DNR	Level Adjustment(1~3)
Shutter Speed	1/2 ~ 1/60,000 sec
AGC	Auto / MANUAL / MAX Gain Limit
White Balance	AUTO/Manual/Indoor/Outdoor/One-Push
WDR	AUTO / MANUAL
Other Functions	POWER UP ACTION, Auto Flip, Parking Action

PAN / TILT	
Range	Pan : 360°(Endless)
	Tilt : 90°
Pan/Tilt Speed	Preset : 360°/ sec
	Manual : 0.05°~360°/sec (Zoom Proportional)
	Scan : 1°~ 360°/ sec
Preset	1024 Presets with Labels
Pattern	128 Patterns
Scan	128 Scans
Group	128 Groups (MAX. 20 Entries for Each Group)

GENERAL	
Sensor In/Out	Built-in 2 Input / 1 Output
Video Out	BNC: VBS 1.0 Vp-p
Power	AC 24V/DC 12V 23W hPOE(IEEE 802.3at) 40W
Approvals	FCC, CE, ROHS
Material	Body: Plastic Clear Bubble: Polycarbonate
Dimension	Net (ØxH): Ø211.8 x 244.2(H) mm
Weight	Net: 1.75 Kg, Package: 2.4 Kg
Operating Temp.	-10°C ~ 50°C / 14°F ~ 122°F

NETWORK		
OS	Embedded Linux	
DSP	TI DM368	
Video Compression	Triple Codec,H.264/MPEG4/MJPEG	
Video Streaming	Multi Streaming CBR/VBR (Controllable frame rate and Bandwidth)	
Resolution	All Codec:1080p,720p,D1,CIF MJPEG : QCIF	
Frame Rate	Max. 30 fps for 1080p/720p/D1/CIF/QCIF	
Audio Compression	Two way, G.711 PCM. µ-law 64kbps 8kHz	
Local Storage	SDHC memory card (Card is not included)	
Motion detection	Notification: FTP, e-mail, Alarm out, JPEG Recording on SD	
Alarm	Pre-Pos Alarm	
Max No. of Clients	5	
Protocols Support	IPv4	ONVIF, TCP/IP, UDP/IP, RTP(UDP), RTSP, NTP, HTTP,HTTPS, SSL, DNS, DDNS, DHCP, FTP, SMTP, ICMP, SNMPv1/v2c/v3(MIB-2)
	IPv6	TCP/IP, HTTP, HTTPS, DHCP
	DDNS	Proprietary: NET4C Public DDNS services Support: www.dyndns.com, www.no-ip.com
	Security	HTTPS(SSL), Digest Authentication(ID/PW)
OS Supported	Windows 7, Vista, XP	
Web-Viewer functions	Auto map, Virtual Joystick, Power PTZ	