

### High Speed in-Ceiling and Indoor IP PTZ Dome Cameras with multi-protocol capabilities



#### DESCRIPTION

Infinova's V1720N-L series represents a state-of-the-art line of indoor, in-ceiling and B racket mount IP PTZ dome cameras. This leading PTZ dome system is an ideal product for the changing environment that is today's security industry. With IP based technology for network oriented security, the V1720N-L bridges the gap between IT and CCTV. Users can view, control, and even program IP PTZ domes from a PC connected to a work station using a standard web browser and Infinova's on-screen simulated keyboard.

Digital video output utilizing MPEG-4 compression schemes deliver high-quality video at up to 30 fps. Built-in software utilizes a standard web-browser to view, control, and program the cameras. Infinova's video management software can be used directly with the IP PTZ domes, providing an online virtual matrix switcher, or in conjunction with software platforms, which allow the video to be recorded on a dedicated server for storage.

As with Infinova's standard PTZ domes, users can choose among 18X12, 22X12, 23X12, 26X12, 35X12 and 36 X12 optical/ digital zoom, ensuring their ability to find the right camera for their project. Digital Signal Processing technology provides enhanced clarity, color and detail, with the day/night camera; usable images can be delivered even in extremely low light conditions. Separate definable privacy zones can be set by administrators to prevent users from viewing restricted areas. The PTZ dome's direction indicators; which can be displayed on the monitor, denote the direction in which it is moving.

Password protection prevents unauthorized users from changing the system setup, as well as other sensitive PTZ dome settings. The PTZ dome's "Home Position" feature allows users to establish a default view or pattern for the PTZ dome when it is not being controlled. The digital slow shutter (D.S.S.) allows a long exposure time of 1/2 second, providing a higher sensitivity and minimum illumination of only 0.03 lux (color, 1/2 s). Color data is captured and stored by the PTZ dome, allowing a user to see things that are typically not visible when using a standard color video camera.

Infinova's variable speed capabilities range from a smooth, fast pan motion of 240° (200° for 35X and 36X) per second to a low speed of 0.5° per second. The system is capable of 360° rotation and has an "auto flip" feature that allows the camera to rotate 180° and reposition itself for uninterrupted viewing of any subject that passes directly beneath the PTZ dome.

#### FEATURES

- Sony or Hitachi cameras
- Advanced 1/4" CCD camera
- >480 lines of resolution
- 18X12, 22X12, 23X12, 26X12, 35X12 and 36 X12 zoom available
- Image Stabilization on 35X model
- Built-in video over IP server, no additional equipment required
- MPEG-4 video compression for optimum picture quality and transmission speed
- View and control cameras from anywhere using a standard web browser
- Up to 128 presets with 16 characters each
- Auto Iris (AI), Auto Focus (AF), Back Light Compensation (BLC)
- Wide dynamic range on the 23X, 35X and 36X models
- Proportional high-speed pan/tilt and automatic flip
- Password protection
- Up to 24 advanced spherical privacy zones
- 16 video blanking sectors
- 4 programmable patterns
- Automatic home position
- Internal multi-protocol receiver/driver
- PTZ Data including RS-422 and RS-485
- 4 alarm inputs with programmable output
- Built-in surge and lightning protection
- Easy to install with quick and simple electrical connections
- Exceeds IP66 Specifications
- Offer network service QoS
- Vandal-resistant option available (polycarbonate)



### SPECIFICATIONS

#### General

Optical Zoom:	18X, 22X, 23X, 26X, 35X, 36X
Digital Zoom:	12X (all versions)
Image Stabilization	35X zoom
Programmable Presets:	up to 128
RJ-45 Connectors:	1
Programmable Patterns:	4
Programmable Areas:	16
Spherical Privacy Zones:	Up to 24
Video Blanking Sectors:	16
Image Mirror Function:	Yes

#### Auto Synchronization

Line-Locked:	Remote V-phase adjustment
Internal:	Built-in sync generator
Alarm Inputs:	4 Photo-couple contacts/ 7mA @12 VDC
Alarm Outputs:	1 Open-collector drivers @12 VDC, 50 mA

#### IP Specifications

Video Standards:	ISO/IEC 14496 (MPEG-4)
Data Rate:	9.6 kBit/s - 4 MBit/s
Video Resolution:	704 x 576 (4CIF: 30 fps) 704 x 288 (2 CIF: 30 fps) 352 x 576 (Half D1: 25 resp. 30 fields/s) 352 x 288 (CIF: 25 resp. 30 fps) 176 x 144 (QCIF 25 resp. 30 fps)
Overall Delay:	100 ms
Network Connection:	10/100M Base-T
Network Protocols:	ATP, Telnet, ODP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP

#### Mechanical

Manual Pan/Tilt Speed:	0.5° ~ 90° per second (0.5° ~ 180° per second for 35X and 36X) (based on zoom position)
Preset Pan/Tilt Speed:	240° per second, maximum (200° per second, maximum for 35X and 36X)
Pan Travel:	360° continuous
Tilt Travel:	-3° ~ 90°
Pan/Tilt Accuracy:	±1° (±0.3° for 35X and 36X)
Zoom/Focus Accuracy:	±0.5%
Motor:	Stepping Motor
Product Weight:	6.19 lbs. (2.8 kg)
Product Dimension:	10.83" x 8.58" (275mm x 218mm)

#### Electrical

Input Voltage:	12 VDC, 24 VAC
Power Consumption:	12 VDC: 17 watts 24 VAC: 27 watts
Power On In-Rush Current:	12 VDC, 4 amps (maximum) 24 VAC, 2 amps (maximum)

#### Environment

Operating Temperature:	14°F ~ 104°F (-10°C ~ 40°C)
Fan & Heater:	Continuous fan; auto-start heater
Humidity:	0~90% RH (Non-condensing)

#### Certifications

FCC, CE

ISO 9001:2000

**Protocols Supported:** INFINOVA, PELCO-P/D, Up the Coax

### ORDERING INFORMATION

Please consult the part number guide on the next page for complete part numbering information.

#### PTZ Dome Installation Mounts

For use with V1720N-L series indoor PTZ domes

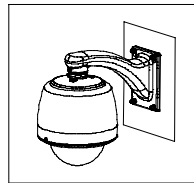
V1761	Wall Mount, 10" horizontal, 1.5" NPT
V1761L	Wall Mount, 17" horizontal, 1.5" NPT
V1762	Corner Mount, 10" horizontal, 1.5" NPT
V1763	Pole Mount, 10" horizontal, 1.5" NPT
V1764	Pendent Mount, 15" long vertical, 1.5" NPT, indoor
V1766	Indoor Drop Ceiling Panel, 2'x2', pre-cut
V1760D	Desktop Demo Stand, 1.5" NPT

For detailed information, please refer to V1760 series indoor/outdoor dome mounts

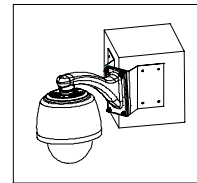
#### Minimum PC Requirements

Pentium 4 processor @ 1.6 GHz  
Windows 2000/XP operating system  
256 MB RAM  
100 MB Ethernet card  
Internet Explorer 6.0 or Infinova Video Management Software

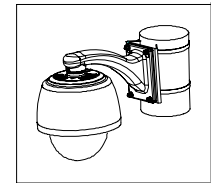
### MOUNTING



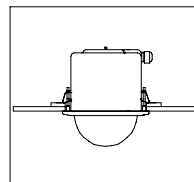
Wall Mounting



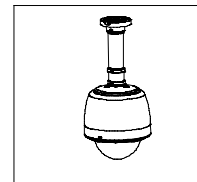
Corner Mounting



Pole Mounting



Ceiling Mounting



Pendant Mounting



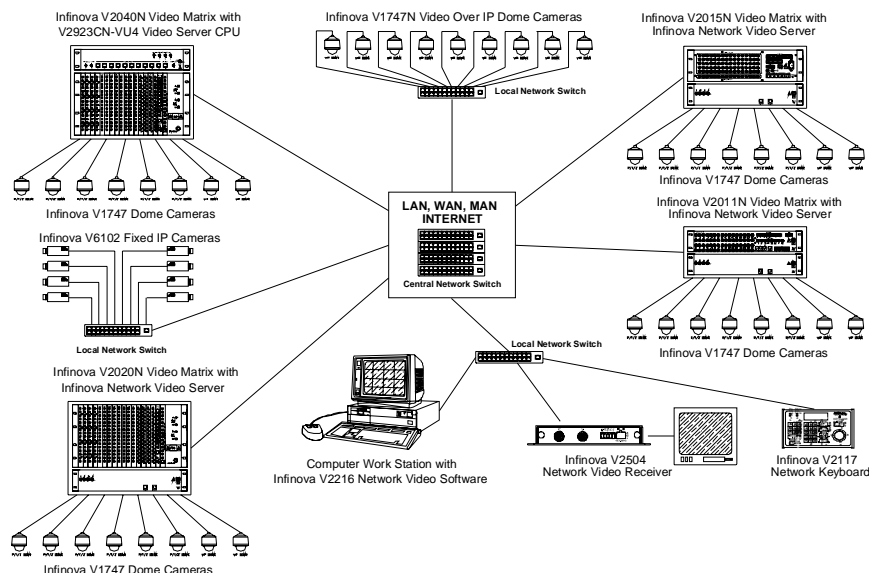
### IP PTZ DOME CAMERA PART NUMBERING SYSTEM:

TYPE	BUBBLE	18X Color	22X Color	23X D/N	26X D/N	35X D/N	36X D/N
Indoor Recessed Ceiling Mount NTSC Camera	Recessed Clear	V1725N-L0C2C	V1726N-L0C2C	V1727N-L0C2C	V1728N-L0C2C	V1729N-L0C2C	V1723N-L0C2C
	Recessed Smoked	V1725N-L0S2C	V1726N-L0S2C	V1727N-L0S2C	V1728N-L0S2C	V1729N-L0S2C	V1723N-L0S2C
	Vandal-Resistant Clear	V1725N-L0C3C	V1726N-L0C3C	V1727N-L0C3C	V1728N-L0C3C	V1729N-L0C3C	V1723N-L0C3C
	Vandal-Resistant Smoked	V1725N-L0S3C	V1726N-L0S3C	V1727N-L0S3C	V1728N-L0S3C	V1729N-L0S3C	V1723N-L0S3C
Indoor Recessed Ceiling Mount PAL Camera	Recessed Clear	V1725N-L1C2C	V1726N-L1C2C	V1727N-L1C2C	V1728N-L1C2C	V1729N-L1C2C	V1723N-L1C2C
	Recessed Smoked	V1725N-L1S2C	V1726N-L1S2C	V1727N-L1S2C	V1728N-L1S2C	V1729N-L1S2C	V1723N-L1S2C
	Vandal-Resistant Clear	V1725N-L1C3C	V1726N-L1C3C	V1727N-L1C3C	V1728N-L1C3C	V1729N-L1C3C	V1723N-L1C3C
	Vandal-Resistant Smoked	V1725N-L1S3C	V1726N-L1S3C	V1727N-L1S3C	V1728N-L1S3C	V1729N-L1S3C	V1723N-L1S3C
Indoor Pendant Mount NTSC Camera	Pendant Clear	V1725N-L0C2B	V1726N-L0C2B	V1727N-L0C2B	V1728N-L0C2B	V1729N-L0C2B	V1723N-L0C2B
	Pendant Smoked	V1725N-L0S2B	V1726N-L0S2B	V1727N-L0S2B	V1728N-L0S2B	V1729N-L0S2B	V1723N-L0S2B
	Vandal-Resistant Clear	V1725N-L0C3B	V1726N-L0C3B	V1727N-L0C3B	V1728N-L0C3B	V1729N-L0C3B	V1723N-L0C3B
	Vandal-Resistant Smoked	V1725N-L0S3B	V1726N-L0S3B	V1727N-L0S3B	V1728N-L0S3B	V1729N-L0S3B	V1723N-L0S3B
Indoor Pendant Mount PAL Camera	Pendant Clear	V1725N-L1C2B	V1726N-L1C2B	V1727N-L1C2B	V1728N-L1C2B	V1729N-L1C2B	V1723N-L1C2B
	Pendant Smoked	V1725N-L1S2B	V1726N-L1S2B	V1727N-L1S2B	V1728N-L1S2B	V1729N-L1S2B	V1723N-L1S2B
	Vandal-Resistant Clear	V1725N-L1C3B	V1726N-L1C3B	V1727N-L1C3B	V1728N-L1C3B	V1729N-L1C3B	V1723N-L1C3B
	Vandal-Resistant Smoked	V1725N-L1S3B	V1726N-L1S3B	V1727N-L1S3B	V1728N-L1S3B	V1729N-L1S3B	V1723N-L1S3B

### PART NUMBER EXTENSIONS FOR POWER INPUT SELECTION:

12 VDC	24 VAC	EX: 12 DC Input:	EX: 24 VAC Input:
5	6	V1725N-L0C2B5	V1725N-L0C2B6

### APPLICATION DIAGRAM VIDEO OVER IP NETWORKS - CAMERAS AND MATRIX SWITCHERS



#### CAMERA PARAMETERS

Dome Model	V1725N-L	V1726N-L	V1727N-L	V1728N-L	V1729N-L	V1723N-L
Optic Zoom	18X	22X	23X	26X	35X	36X
Video Type	PAL/NTSC (Color)	PAL/NTSC (Color)	PAL/NTSC (D/N)	PAL/NTSC (D/N)	PAL/NTSC (D/N)	PAL/NTSC (D/N)
Scanning System	2:1 Interlace Scanning					
Image Sensor	1/4" Interlace Scanning CCD		1/4" Progressive Scanning CCD	1/4" Interlace Scanning CCD	1/4" Progressive Scanning CCD	1/4" Interlace Scanning CCD
Resolution	PAL/440K: 752(H) x 582 (V) NTSC/380K: 768(H) x 494 (V)	PAL/440K: 752(H) x 582 (V) NTSC/380K: 768(H) x 494 (V)	PAL/440K: 752 (H) x 582 (V) NTSC/380K: 768 (H) x 494 (V)	PAL/440K: 752 (H) x 582 (V) NTSC/380K: 768 (H) x 494 (V)	PAL/440K: 752 (H) x 582 (V) NTSC/380K: 768 (H) x 494 (V)	PAL/440K: 752(H)x 582 (V) NTSC/380K: 768(H)x 494 (V)
Aperture/Focal Length	F1.4 ~ F3.0 f=4.1 ~ 73.8 mm	F1.6 ~ F3.8 f=4 ~ 88 mm	F1.6 ~ F3.7 f=3.6 ~ 82.8 mm	F1.6 ~ F3.8 f=3.5 ~ 91 mm	F1.4 ~ F4.2 f=3.4 ~ 119 mm	F1.6-4.5 f=3.4~122.4mm
Angle of View	48° (Wide) / 2.8° (Tele)	47°(Wide) / 2.2° (Tele)	54° (Wide) / 2.5° (Tele)	54.2° (Wide)/ 2.2° (Tele)	55.8° (Wide) / 1.7° (Tele)	57.8°(Wide)/ 1.7°(Tele)
Minimum Work Distance	0.29m (Wide) ~0.8m (Tele)	0.01m (Wide) ~1.6m (Tele)	0.01m (Wide) ~1.0m (Tele)	0.32m (Wide) ~1.5m (Tele)	0.01m (Wide) ~1.0m (Tele)	0.32m ( Wide ) ~1.5m(Tele)
Sensitivity	1.0 lux (PAL: 1/50s, NTSC: 1/60s)	2.0 lux (214) 1.0 lux (274) (PAL: 1/50s, NTSC: 1/60s)	Color Mode (IR-Cut On): 1.0 lux (NTSC:1/60s, PAL: 1/50s) 0.1 lux (NTSC:1/4s, PAL: 1/3s) 0.05Lux (NTSC:1/2s, PAL: 1/1.5s) B/W Mode (IR-Cut Off): 0.01 lux (NTSC:1/4s, PAL 1/3s)	Color Mode (IR-Cut On): 1.0 lux (PAL: 1/50s , NTSC: 1/60s) 0.07 lux (PAL: 1/3s, NTSC: 1/4s) B/W Mode (IR-Cut Off): 0.15 lux (PAL: 1/50s, NTSC: 1/60s) 0.01 lux (PAL: 1/3s , NTSC: 1/4s)	Color Mode (IR-Cut On): 0.5 lux (PAL: 1/50s , NTSC: 1/60s) 0.05 lux (PAL: 1/3s, NTSC: 1/4s) 0.025Lux (PAL:1/1.5s, NTSC: 1/2s) B/W Mode (IR-Cut Off): 0.01Lux: (PAL: 1/3s, NTSC:1/4s)	Color Mode (IR-Cut On): 1.4Lux (NTSC: 1/60s, PAL: 1/50s) 0.1Lux (NTSC: 1/4s, PAL: 1/3s) B/W Mode (IR-Cut Off): 0.01Lux (NTSC: 1/4s, PAL: 1/3s)
Horizontal	480 TVL		540 TVL	480 TVL	540 TVL	530TVL
S/N Ratio	>50dB					
Video Output	1.0 ±0.2 Vp-p					
Backlight Compensation	Off/On					
Sync System	Internal/External					
WDR	/	/	OFF/WDR/ AD WDR/ WDR*/ AD WDR*	/	MD1/MD2/OFF	Off/On
FNR	/	/	OFF/AUTO/MANU	/	/	/
Stabilization	/	/	/	/	Yes	/
Digital Zoom	1~12X Adjustable					
DSS	No	Yes	Yes	Yes	Yes	Yes
Focus	Auto/Manual					
White Balance	Auto/Manual					
Shutter Speed	Auto: Default Set Manual: PAL: 1/50~1/10000s NTSC: 1/60~1/10000s	Auto: Default Set Manual: PAL: 1/1.5~1/30000s NTSC: 1/2~1/30000s	Auto: Default Set Manual: PAL: 1/1.5~1/30000s NTSC: 1/2~1/30000s	Auto: Default Set Manual: PAL: 1/1~1/10000s NTSC: 1/1~1/10000s	Auto: Default Set Manual: PAL: 1/1.5~1/30000s NTSC: 1/2~1/30000s	Auto: Default Set Manual: PAL: 1/1~1/10000s NTSC: 1/1~1/10000s
Iris	Auto/Manual					