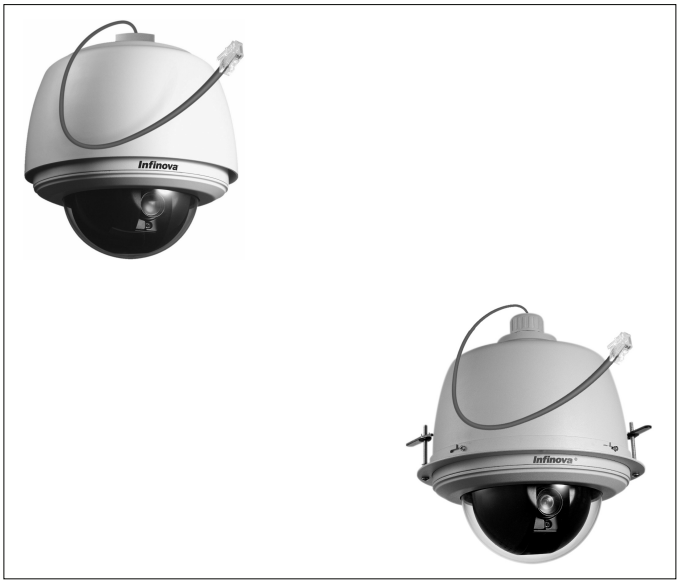
High Speed in-Ceiling and Bracket IP PTZ Dome Cameras with Multi-protocol Capabilities, MPEG-4/MJPEG Compression



FEATURES

- Advanced Sony cameras and Hitachi cameras for selection
- >480 lines of resolution for 18X, 22X, 26X cameras
- >530 lines of resolution for 23X, 35X, 36X cameras
- 12X digital zoom available for all versions
- Built-in video over IP server, no additional equipment required
- MPEG-4/MJPEG video compression
- Dual stream encoding
- Bi-directional audio (optional)
- Motion detection
- Alarm inputs and outputs (optional)
- Supports multiple ways to handle alarms, such as sending an email, FTP upload, audible alarm, SD storage (trigger recording), relay output
- SD card storage function (optional)
- Compatible with TCP/IP, HTTP, ICMP, PPPoE, DHCP, UDP, DNS, DDNS, SMTP, RTP, RTSP, SNMP protocols
- View and control cameras via Web server, Infinova V2216 and leading Network Video Management software packages
- Up to 128 presets with 16 characters each
- Auto Iris (AI), Auto Focus (AF), Back Light Compensation (BLC)
- Image Stabilization on 35X model
- 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
- Built-in surge and lightning protection
- Anti-ice / Anti-mist, built-in heater and air circulating system available
- Easy to install with quick and simple electrical connections
- Exceeds IP66 and NEMA 4X Specifications
- Vandal-resistant option available (polycarbonate)

DESCRIPTION

Infinova's V1740N-M series represents a state-of-the-art line of outdoor, Bracket 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 V1740N-M 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/MJPEG 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 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.

It also features programmable motion detection and an SD card for front information storage. They can automatically record if any alarm occurs, and also support manual recording as well as automatic recording when network anomaly, which ensures the high security of your surveillance system.

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.

SPECIFICATIONS

General

Optical zoom:	18X, 22X, 23X, 26X, 35X, 36X
Digital zoom:	12X (all versions)
Image Stabilization:	35X zoom
Programmable Presets:	Up to 128
Camera Address:	
PELCO-P:	1~255
PELCO- D:	1~254
Infinova:	1~128
Programmable Patterns:	4
Programmable Areas:	16
Spherical privacy zones:	24
Video Blanking Sectors:	16
Image Mirror Function:	Yes

Auto Synchronization

Line-Locked:	Remote V-phase adjustment
Internal:	Built-in sync generator

IP Specifications

Video Coding:	MPEG-4/MJPEG
Data Rate:	128KBit/s - 4MBit/s
Frame Rate:	PAL: 25fps; NTSC: 30fps (max)
Image Resolution:	
Major stream:	D1/ 2CIF/ CIF/ QCIF
Minor stream:	CIF/ QCIF
Video Size:	PAL: 720×576, 720×288, 352×288, 176x144 NTSC: 720×480, 720×240, 352×240
Overall Delay:	200ms
Network Connection:	10/100 Base T
Network Protocols:	TCP/IP, HTTP, ICMP, PPPoE, DHCP, UDP, DNS, DDNS, SMTP, RTP, RTSP, SNMP etc.
Alarm (optional):	2 alarm inputs, 2 relay outputs
Motion detection:	Yes

Audio (optional)

Compression Standard:	G.711
Ports:	1 input/1output

Physical

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, max (200° per second (max) 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

Mechanical

Product Weight:	8.44 lbs. (3.82 kg)
Product Dimension:	10.83"×Φ9.45" (275mm×Φ240mm)

Electrical

Input Voltage:	12VDC or 24 VAC
Power Consumption:	12VDC: 22W 24VAC: 50W
Power On In-Rush Current:	12 VDC, 4 amps (max) 24 VAC, 2 amps (max)

Environment

Operating Temperature:	-40°F ~ 122°F (-40°C ~ 50°C)
Fan & Heater:	Continuous fan; auto-start heater
Humidity:	0~90% RH (Non-condensing)

Certifications

FCC, CE
ISO 9001:2000

ORDERING INFORMATION

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

PTZ Dome Installation Mounts

For use with V1740N-M series outdoor 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
V1764A	Pendent Mount, 15" long vertical, 1.5" NPT, outdoor side opening for wiring
V1764B	Pendent Mount, 15" long vertical, 1.5" NPT, outdoor top opening for wiring
V1765	Parapet Mount, 12" horizontal, vertical attachment, 1.5" NPT
V1765A	Parapet Mount, V1765 horizontal attachment adapter

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

SD card model:

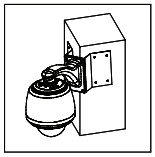
V3096-4G SD card, 4G
V3096-8G SD card, 8G
V3096-16G SD card, 16G

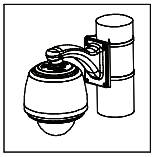
Minimum PC Requirements

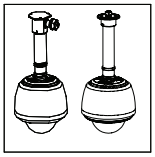
Pentium 4 processor@1.6 GHz
Windows 2000/XP operating system
256 MB RAM
100 MB Ethernet card
Internet Explorer 6.0 or Infinova Video Management Software

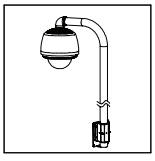
MOUNTING

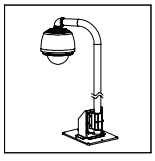

Wall Mounting

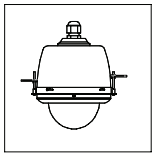

Corner Mounting


Pole Mounting


Pendant Mounting


Over-roof Side Wall Mounting


Over-roof horizontal Surface Mounting


Ceiling 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
Outdoor Recessed Ceiling Mount NTSC Camera	Standard Clear	V1745N-M0C2C	V1746N-M0C2C	V1747N-M0C2C	V1748N-M0C2C	V1749N-M0C2C	V1743N-M0C2C
	Standard Smoked	V1745N-M0S2C	V1746N-M0S2C	V1747N-M0S2C	V1748N-M0S2C	V1749N-M0S2C	V1743N-M0S2C
	Vandal-Resistant Clear	V1745N-M0C3C	V1746N-M0C3C	V1747N-M0C3C	V1748N-M0C3C	V1749N-M0C3C	V1743N-M0C3C
	Vandal-Resistant Smoked	V1745N-M0S3C	V1746N-M0S3C	V1747N-M0S3C	V1748N-M0S3C	V1749N-M0S3C	V1743N-M0S3C
Outdoor Recessed Ceiling Mount PAL Camera	Standard Clear	V1745N-M1C2C	V1746N-M1C2C	V1747N-M1C2C	V1748N-M1C2C	V1749N-M1C2C	V1743N-M1C2C
	Standard Smoked	V1745N-M1S2C	V1746N-M1S2C	V1747N-M1S2C	V1748N-M1S2C	V1749N-M1S2C	V1743N-M1S2C
	Vandal-Resistant Clear	V1745N-M1C3C	V1746N-M1C3C	V1747N-M1C3C	V1748N-M1C3C	V1749N-M1C3C	V1743N-M1C3C
	Vandal-Resistant Smoked	V1745N-M1S3C	V1746N-M1S3C	V1747N-M1S3C	V1748N-M1S3C	V1749N-M1S3C	V1743N-M1S3C
Outdoor Pendant Mount NTSC Camera	Standard Clear	V1745N-M0C2B	V1746N-M0C2B	V1747N-M0C2B	V1748N-M0C2B	V1749N-M0C2B	V1743N-M0C2B
	Standard Smoked	V1745N-M0S2B	V1746N-M0S2B	V1747N-M0S2B	V1748N-M0S2B	V1749N-M0S2B	V1743N-M0S2B
	Vandal-Resistant Clear	V1745N-M0C3B	V1746N-M0C3B	V1747N-M0C3B	V1748N-M0C3B	V1749N-M0C3B	V1743N-M0C3B
	Vandal-Resistant Smoked	V1745N-M0S3B	V1746N-M0S3B	V1747N-M0S3B	V1748N-M0S3B	V1749N-M0S3B	V1743N-M0S3B
Outdoor Pendant Mount PAL Camera	Standard Clear	V1745N-M1C2B	V1746N-M1C2B	V1747N-M1C2B	V1748N-M1C2B	V1749N-M1C2B	V1743N-M1C2B
	Standard Smoked	V1745N-M1S2B	V1746N-M1S2B	V1747N-M1S2B	V1748N-M1S2B	V1749N-M1S2B	V1743N-M1S2B
	Vandal-Resistant Clear	V1745N-M1C3B	V1746N-M1C3B	V1747N-M1C3B	V1748N-M1C3B	V1749N-M1C3B	V1743N-M1C3B
	Vandal-Resistant Smoked	V1745N-M1S3B	V1746N-M1S3B	V1747N-M1S3B	V1748N-M1S3B	V1749N-M1S3B	V1743N-M1S3B

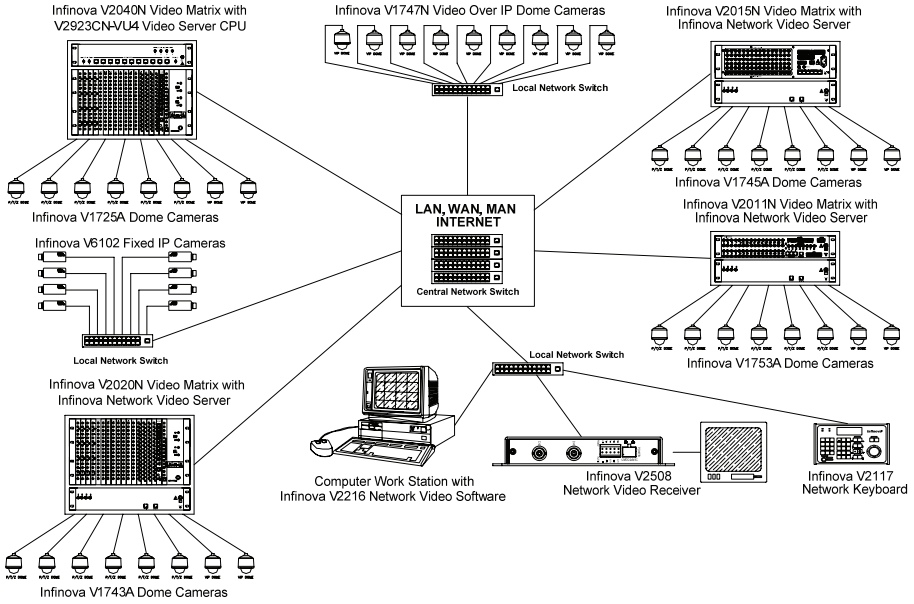
PART NUMBER EXTENSIONS FOR POWER INPUT SELECTION:

12 VDC	24 VAC	EX: 12 DC Input:	EX: 24 VAC Input:
5	6	V1745N-M0C2B5	V1745N-M0C2B6

PART NUMBER EXTENSIONS FOR ALARM/AUDIO/RS485 SELECTION:

Without Alarm/Audio/RS485	With Alarm/Audio/RS485	EX: Without Alarm/Audio/RS485	EX: With Alarm/Audio/RS485
none	W	V1745N-M0C2B6	V1745N-M0C2B6W

APPLICATION DIAGRAM VIDEO OVER IP NETWORKS - CAMERAS AND MATRIX SWITCHERS



CAMERA PARAMETERS

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
Analog Video Resolution	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 ~ F4.5 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)	58.2° (Wide) / 1.8° (Tele)	57.8°(Wide)/ 1.7°(Tele)
Min. 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) ~1.5m (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 (PAL: 1/50s, NTSC:1/60s) 0.1 lux (PAL: 1/3s, NTSC:1/4s) 0.05 lux (PAL:1/1.5s , NTSC:1/2s) B/W Mode (IR-Cut Off): 0.01 lux (PAL: 1/3s, NTSC:1/4s)	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): 1.0 lux (PAL: 1/50s , NTSC: 1/60s) 0.1 lux (PAL: 1/3s, NTSC: 1/4s) B/W Mode (IR-Cut Off): 0.01 lux: (PAL: 1/3s, NTSC:1/4s)	Color Mode (IR-Cut On): 1.4 lux (PAL: 1/50s, NTSC: 1/60s) 0.1 lux (PAL: 1/3s, NTSC: 1/4s) B/W Mode (IR-Cut Off): 0.01 lux (PAL: 1/3s, NTSC: 1/4s)
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*	/	OFF/WDR/ AD WDR/ WDR*/ AD WDR*	Off/On
FNR	/	/	OFF/AUTO/MANU	/	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					