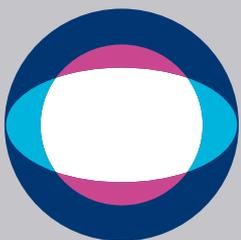


Datasheets

Complete IP Video Security Solutions



IndigoVision

www.indigovision.com

Contents

- 9000 Fixed IP Cameras
- 9000 Fixed IP Dome Cameras
- 9000 PTZ IP Dome Cameras
- 11000 Fixed IP Cameras
- 11000 PTZ IP Dome Cameras
- HD Minidome Cameras
- NVR-AS 3000 RA / FD
- Compact NVR-AS 3000
- Windows Network Video Recorder
- 4-Channel Rack
- 10-Channel Rack
- Standalone Transmitters and Receivers
- Surveillance Keyboard
- Alarm Panel
- Control Center
- IP Video Wall
- Internet Streaming Server
- Software Development Kit



IndigoVision

Complete IP Video Security Solutions



9000 Fixed IP Camera Range

Always in focus

IndigoVision's IP cameras are designed to be used with the company's complete end-to-end IP Video solution and have class-leading H.264 compression technology built-in. The cameras can be ceiling or wall mounted and use a Sony EXview HAD CCD Sensor, guaranteeing excellent performance.

- Day or Day/Night IP Camera
- Class-leading H.264 compression
- Optional full duplex audio
- Excellent image quality from Sony EXview HAD CCD Sensor
- Optional built-in real time analytics
- Full frame rate, 25/30fps guaranteed



IndigoVision's cameras enable simple and easy deployment of IP based video systems as they only require a single CAT 5 cable for connection to the network. The built-in Power-over-Ethernet support allows the camera to be powered directly from the network, reducing installation costs. All cameras are supplied with lenses to ensure consistent video quality.

IndigoVision's IP Video solution allows advanced features such as Activity Controlled Framerate (ACF) and camerabased real-time analytics to be deployed in the camera itself. These features reduce the bandwidth and NVR storage requirements during periods of scene inactivity and allow the user to deploy advanced analytics to identify events as they occur in real-time.

Camera Product Codes (PAL)

9000 Fixed IP Dome (PAL)	Standard Lens		Telephoto Lens	
	9000S	9000E	9000S	9000E
Day, PoE	749277	769277	749281	769281
Day with Audio, PoE	749275	769275	749279	769279
Day/Night, PoE	749273	769273	749285	769285
Day/Night with Audio, PoE	749271	769271	749283	769283

Camera Product Codes (NTSC)

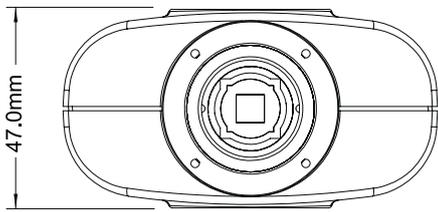
9000 Fixed IP Dome (NTSC)	Standard Lens		Telephoto Lens	
	9000S	9000E	9000S	9000E
Day, PoE	749276	769276	749280	769280
Day with Audio, PoE	749274	769274	749278	769278
Day/Night, PoE	749272	769272	749284	769284
Day/Night with Audio, PoE	749270	769270	749282	769282

The 9000E product allows full frame rate video, at full 4SIF resolution.

The 9000S product allows the camera to be recorded at full frame rate at SIF resolution, half frame rate at 2SIF and one third frame rate at 4SIF resolution

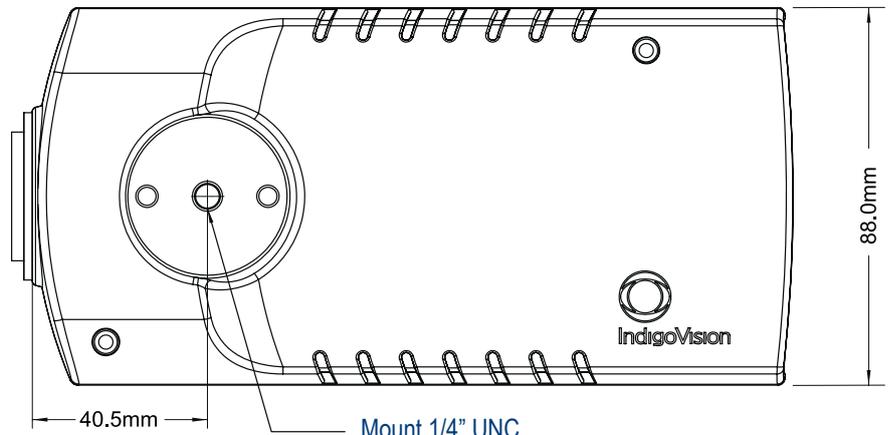
Lens Options	Focal Length	Horizontal View Angle	Max Aperture	Day/Night with IR Light Sources	Day/Night without IR Light Sources	Day Only
Standard	3-8mm	66.4° (W) 26.2° (T)	F1.0	✓	X	✓
Telephoto	5-50mm	39.1° (W) 4.3° (T)	F1.4	✓	X	✓

Dimensions



47.0mm

View on Front Face



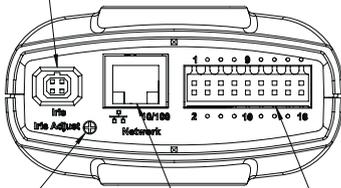
88.0mm

40.5mm

Mount 1/4" UNC

View on Top or Bottom Face

Auto Iris

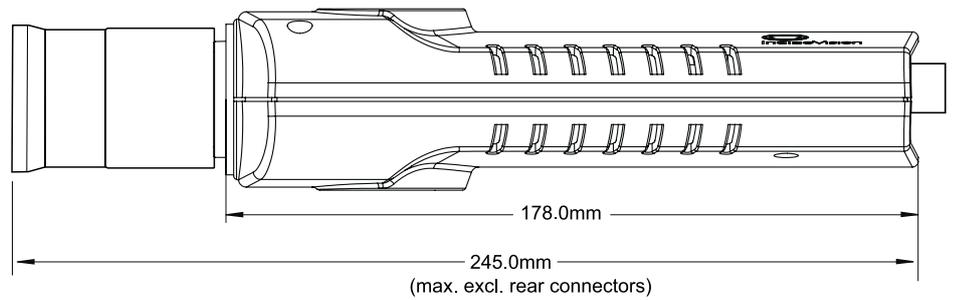


Auto Adjust

Network

I/O

View on Back Face

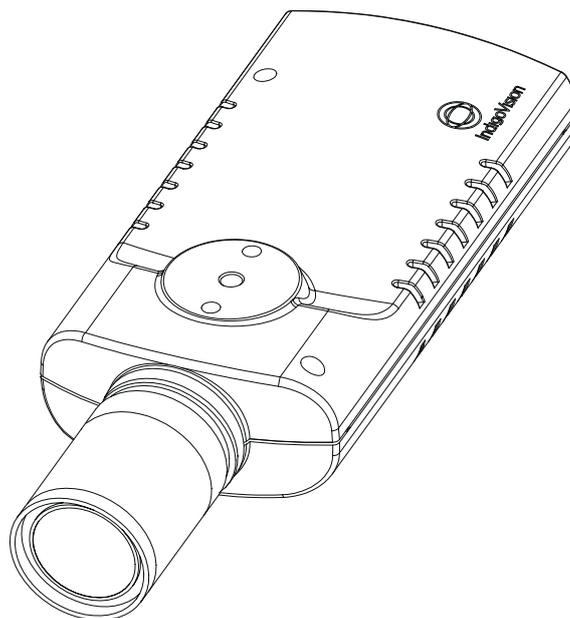


178.0mm

245.0mm

(max. excl. rear connectors)

View on Side



Specification

Camera Features	NTSC	PAL
CCD Sensor	Sony Ex View 1/4" interlaced Color or Color/Mono, 490 TVL Color, 540 TVL Mono	
Active Pixels (HxV)	768x494	752x582
Sensitivity (50IRE, F1.2)	Day: 0.5 Lux Day/Night: 0.5 lux color / 0.05 lux mono when used with 850nm IR lighting	
Lens Options	Standard: 3mm - 8mm, Horizontal view angle 66.4° (W) 26.2° (T) , F1.0, Auto-iris, Vari-focal, CS Mount Telephoto: 5mm - 50mm, Horizontal view angle 39.1° (W) 4.3° (T) , F1.4, Auto-iris, Vari-focal, CS Mount	
Gamma	0.45	
Gain Control	Automatic or fixed manual setting across a 32dB range	
Scan Mode	4SIF Interlaced; 2SIF/SIF Non-interlaced	
Mirror Mode	On or Off	
Synchronization	Internal	
Back Light Compensation	On* or Off	
White Balance Mode	Auto; Fluorescent; Indoor; Outdoor	
Iris Control	Auto-iris DC drive lens as standard	
Shutter Speeds	1/60 to 1/100,000 or Auto*	1/50 to 1/100,000 or Auto*
Electrical	Operating voltage: Power over Ethernet (802.3af Class 0); 24V AC/DC @ 0.29A; Power consumption: 24V @ 0.33A / 8W max	
Video Compression	Full frame rate, full color: H.264 (ISO 14496-10); 25/30fps guaranteed	
Video Bit Rate	User-configurable bit rates from 32Kbps up to 8Mbps	
Multi-streaming	A	B
	4SIF 1 stream	1 stream
	2SIF 2 stream	2 stream
	SIF 3 stream	3 stream
	You can combine one selection from column A plus one selection from column B: e.g. 2x2SIF streams plus 3xSIF streams e.g. 1x4SIF stream plus 1x4SIF stream	
Resolution	4SIF: 704 x 576 pixels 2SIF: 704 x 288 pixels SIF: 352 x 288 pixels (PAL) 4SIF: 704 x 480 pixels 2SIF: 704 x 240 pixels SIF: 352 x 240 pixels (NTSC)	
Video Output	NTSC/PAL composite video, 75 Ohms 1V p-p, Terminal block connector	
Binary Input/Output	2 opto-isolated inputs; 1 solid state opto-isolated relay output	
Network interface	IEEE802.3 and IETF standards: 10/100 Base-T Ethernet, TCP, UDP, ICMP, IGMP, SNMP, HTTP, RTP Embedded Linux firewall. Salted passwords, with MD5 encryption; Up to 16 simultaneous unicast video users plus unlimited multicast users	
Audio Input+	Line in terminal block connector. Nominal voltage: 1V p-p, Mic 30mVp-p. Mic types: dynamic	
Audio Output+	Line out terminal block connector. 1V p-p, Minimum load impedance: 32 Ohms	
Audio Compression+	Full Duplex MPEG-4 Advanced Audio Encoding; 16 kHz sample rate; 16bit resolution. Selectable 32, 48, 64 Kbps bit-rate, 100 - 7000 Hz Bandwidth	
Time	Embedded real-time clock, NTP client	
Regulatory	EN 55022(1994) ITE - Class A; EN 55024(1998) ITE immunity standard; CFR47(1995) Part 15 subpart B -Class A	
Housing	Diecast Aluminium Alloy	
Dimensions/Weight	175mm (depth) x 88mm (width) x 45mm (height) / 0.5Kg	
Operating Temperature	0 to 40°C/+32 to +104°F	

*These options are only applicable for Fixed Iris lenses

+Audio available as an order option



IndigoVision

Complete IP Video Security Solutions



9000 Fixed IP Dome Cameras

Astounding image quality under every lighting condition

The IndigoVision range of Fixed IP Dome cameras are designed to be used with the company's complete end-to-end IP Video solution. Class-leading H.264 compression technology, IndigoVision's guarantee never to drop a frame and the latest WDR technology provides excellent image quality under every lighting condition.

Advanced in-camera features such as Activity Controlled Framerate (ACF) and real-time analytics, reduce bandwidth and storage requirements and allow the user to identify incidents as they occur in real-time.

- 1/3" Progressive Scan
- WDR sensor
- Day/Night with automatic Mechanical IR filter
- Class-leading H.264 compression
- 25/30fps guaranteed
- Power-over-Ethernet for lower installation costs



The IndigoVision 9000 Fixed Dome cameras use the latest Seawolf Sensor from Pixim providing 1/3" Progressive Scan capture with the industry's best Wide Dynamic Range (WDR) performance.

Simple and easy deployment of IP based video systems is possible as the cameras only require a single CAT 5 cable for connection to the network. The built-in Power-over-Ethernet support allows the camera to be powered directly from the network. A unique distributed serverless architecture, with no single-point-of-failure, also helps to simplify system installation and reduce cost.

Camera Product Codes (PAL)

9000 Fixed IP Dome (PAL)	Standard Lens		Telephoto Lens	
	9000S	9000E	9000S	9000E
Internal	749417	769417	749419	769419
Vandal Resistant	749437	769437	749439	769439
Environmental Vandal Resistant	749447	769447	749449	769449

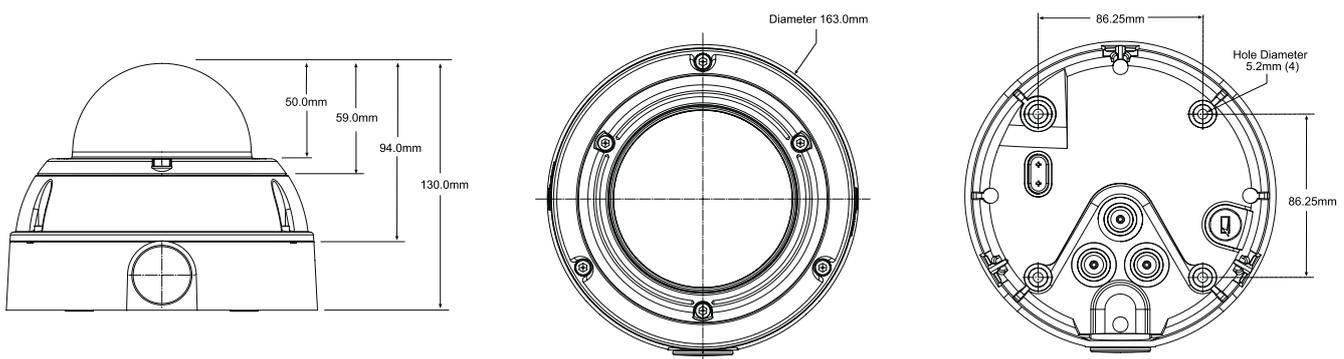
Camera Product Codes (NTSC)

9000 Fixed IP Dome (NTSC)	Standard Lens		Telephoto Lens	
	9000S	9000E	9000S	9000E
Internal	749416	769416	749418	769418
Vandal Resistant	749436	769436	749438	769438
Environmental Vandal Resistant	749446	769446	749448	769448

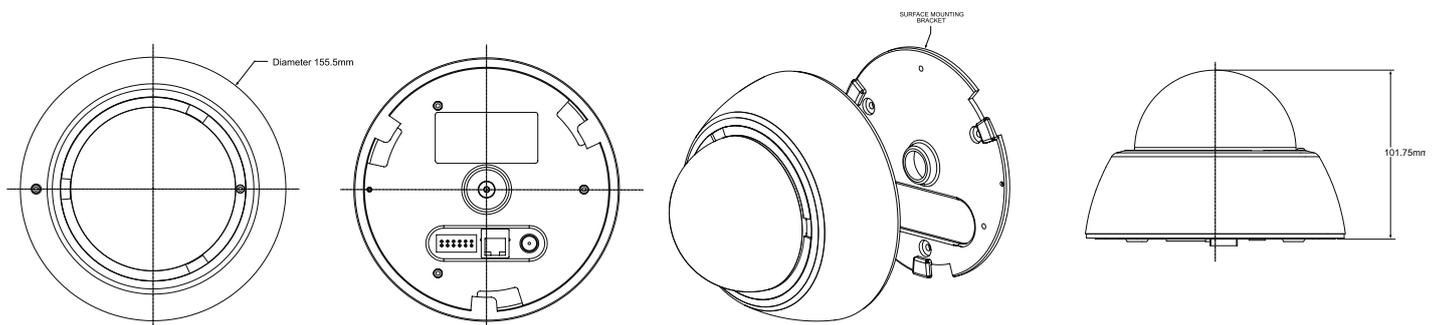
The 9000E product allows full frame rate video, at full 4SIF resolution.

The 9000S product allows the camera to be recorded at full frame rate at SIF resolution, half frame rate at 2SIF and one third frame rate at 4SIF resolution

Dimensions - Vandal Resistant



Dimensions - Internal

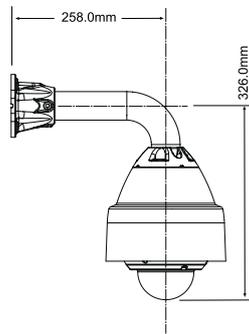


Mounting Options

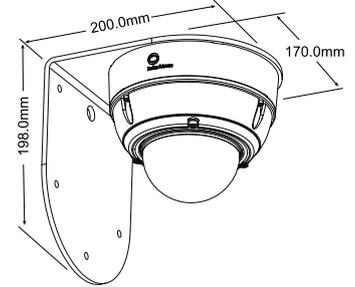
IndigoVision provide a range of mounts allowing installation internally and externally in any environment.



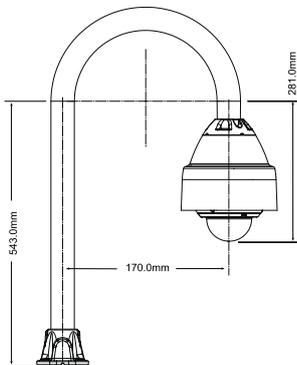
Vandal Resistant Fixed Dome



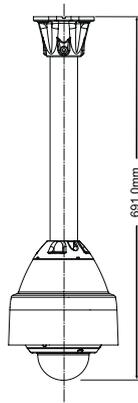
Pendant Wall Mount



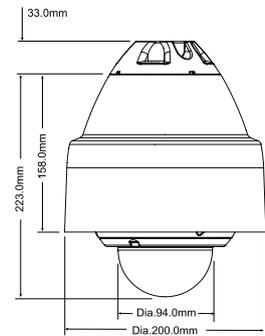
Bracket Wall Mount



Pendant Swan-Neck Mount



Pendant Vertical Pole Mount



NPT Mount

Mount Product Codes

Description	Order Code
Vandal Resistant Fixed IP Dome Pendant Wall Mount (M25)	110021
Vandal Resistant Fixed IP Dome Pendant Swan-Neck Mount (M25)	110023
Vandal Resistant Fixed IP Dome Pendant Vertical Pole Mount (M25)	110025
Vandal Resistant Fixed IP Dome 1.5" NPT Pendant Mount (Male)	110027
Vandal Resistant Fixed IP Dome 1.5" NPT Pendant Mount (Female)	110028
Vandal Resistant Fixed IP Dome Bracket Wall Mount	110026

Specification

Camera Features

Image Sensor	1/3" Progressive CMOS, 690 HTVL effective, > 500 TVL typical																
Active Pixels (HxV)	0.4 Megapixel																
Sensitivity (50IRE, F1.2)	Day/Night: 0.1 lux color / 0.01 lux mono																
Lens Options	Standard: 2.8mm - 10.5mm, Horizontal view angle 101.8° (W) 27.4° (T) , F1.2, Auto-iris, Vari-focal, M14 mount Telephoto: 9mm - 22mm, Horizontal view angle 30.6° (W) 13.0° (T) F1.5, Auto-iris, Vari-focal, M14 mount																
ICR Filter / Day/Night	Mechanical IR Cut Filter																
Gamma	0.45																
Gain Control	Automatic or fixed manual setting across a 40dB range																
Scan Mode	4SIF Progressive; 2SIF/SIF Non-interlaced																
Dynamic Range	WDR: 120dB Max, 102dB Typical																
SNR	> 50dB																
Mirror Mode	On or Off																
Synchronization	Internal																
Back Light Compensation	On* or Off																
White Balance Mode	Auto; Manual; Indoor; Outdoor																
Iris Control	Auto-iris DC drive lens as standard																
Shutter Speeds	Auto from 1/60 (NTSC) or 1/50 (PAL) to 1/30,720																
Electrical	Operating voltage: Power over Ethernet (802.3af Class 0) or 24V AC/DC (DC Power Supply separately orderable) Power consumption: 24V @ 0.33A / 10W max Heater/Fan Power consumption (Environmental variant only): 30W; 12V DC Power Supply included.																
Video Compression	Full frame rate, full color: H.264 (ISO 14496-10); 25/30fps guaranteed																
Video Bit Rate	User-configurable bit rates from 32Kbps up to 6Mbps																
Multi-streaming	<table border="1"> <thead> <tr> <th></th> <th>A</th> <th>B</th> <th>You can combine one selection from column A</th> </tr> </thead> <tbody> <tr> <td>SIF</td> <td>3 streams</td> <td>3 streams</td> <td>plus one selection from column B:</td> </tr> <tr> <td>2SIF</td> <td>2 streams</td> <td>2 streams</td> <td>e.g. 2x2SIF streams plus 3xSIF streams</td> </tr> <tr> <td>4SIF</td> <td>1 stream</td> <td>1 stream</td> <td>e.g. 1x4SIF stream plus 1x4SIF stream</td> </tr> </tbody> </table>		A	B	You can combine one selection from column A	SIF	3 streams	3 streams	plus one selection from column B:	2SIF	2 streams	2 streams	e.g. 2x2SIF streams plus 3xSIF streams	4SIF	1 stream	1 stream	e.g. 1x4SIF stream plus 1x4SIF stream
	A	B	You can combine one selection from column A														
SIF	3 streams	3 streams	plus one selection from column B:														
2SIF	2 streams	2 streams	e.g. 2x2SIF streams plus 3xSIF streams														
4SIF	1 stream	1 stream	e.g. 1x4SIF stream plus 1x4SIF stream														
Resolution	SIF: 352 x 288 pixels (PAL); 352 x 240 pixels (NTSC) 2SIF: 704 x 288 pixels (PAL); 704 x 240 pixels (NTSC) 4SIF: 704 x 576 pixels (PAL); 704 x 480 pixels (NTSC)																
Video Output	NTSC/PAL composite video, 75 Ohms 1V p-p, BNC cable harness																
Binary Input/Output	2 opto-isolated inputs ; 1 solid state opto-isolated relay output																
Network interface	IEEE802.3 and IETF standards: 10/100 Base-T Ethernet, TCP, UDP, ICMP, IGMP, SNMP, HTTP Embedded Linux firewall; Up to 16 simultaneous unicast video users plus unlimited multicast users																
Time	Embedded real-time clock, NTP client																
Regulatory	EN 55022(1998) ITE - Class A; EN 55024(1998) ITE immunity standard; CFR47(1995) Part 15 subpart B -Class A																
Recording Order Options	9000S 25/30 fps recording at SIF (2SIF and 4SIF at lower frame rates) 9000E 25/30 fps recording at 4SIF																

Camera Features	Internal	Vandal Resistant	Environmental Vandal Resistant
Housing	Injection Moulded Polycarbonate/ABS Alloy with Polycarbonate dome	Diecast Aluminium Alloy with Polycarbonate dome	Diecast Aluminium Alloy with Polycarbonate dome
Dimensions/Weight	155mm (dia.) x 103mm (h)/0.5Kg	159mm (dia.) x 125mm (h)/0.86Kg	159mm (dia.) x 125mm (h)/0.94Kg
Ingress Protection	N/A	IP66	IP66
Operating Temperature	0 to 40°C/+32 to +104°F	0 to 40°C/+32 to 104°F	-30 to 50°C/-22 to 122°F
Mounting Options	Wall and Ceiling Mountable not suitable for solid surfaces	Wall and ceiling Mountable exit collar included for solid surfaces	Wall and Ceiling Mountable exit collar included for solid surfaces





IndigoVision

Complete IP Video Security Solutions



9000 PTZ IP Dome Cameras

Our ultra-low latency gives operators sharp camera control, with every frame guaranteed.

IndigoVision's range of 9000 PTZ IP dome cameras are designed to be used with the company's complete end-to-end IP Video solution and have class-leading H.264 compression technology built-in. The 9000 PTZ cameras are fully compatible with IndigoVision's SMS4, Security Management software and its range of Network Video Recorders. IndigoVision's guarantee never to drop a frame and ultra-low latency provide excellent image quality.

- Standard and Environmental options
- Day/Night with Auto Mechanical IR filter
- Image Stabilization
- Ultra-low latency, essential for smooth PTZ control
- Wide dynamic range
- Outstanding low light performance
- Progressive or Interlace scan options
18x, 35x and 36x optical zoom

Product Codes

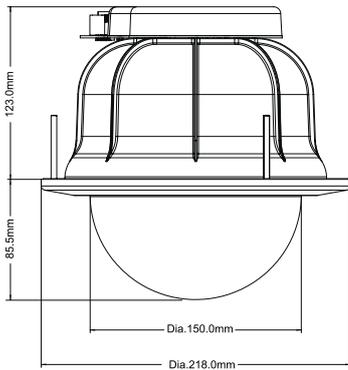
9000 PTZ IP Camera (PAL Region)	18x Lens		35x Lens		36x Lens	
	9000S	9000E	9000S	9000E	9000S	9000E
In-Ceiling	749143	769143	749543	769543	749343	769343
Standard Pendant	749148	769148	749548	769548	749348	769348
Environmental Pendant	749149	769149	749549	769549	749349	769349

9000 PTZ IP Camera (NTSC Region)	18x Lens		35x Lens		36x Lens	
	9000S	9000E	9000S	9000E	9000S	9000E
In-Ceiling	749142	769142	749542	769542	749342	769342
Standard Pendant	749146	769146	749546	769546	749346	769346
Environmental Pendant	749147	769147	749547	769547	749347	769347

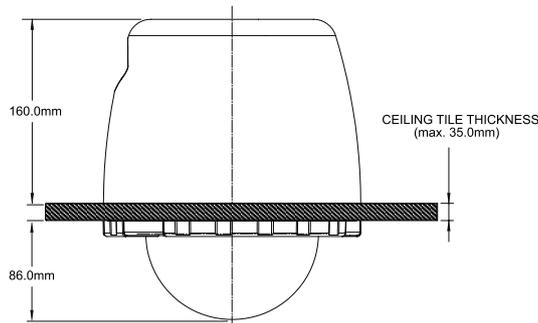
The 9000E product allows full frame rate video, at full 4SIF resolution.

The 9000S product allows the camera to be recorded at full frame rate at SIF resolution, half frame rate at 2SIF and one third frame rate at 4SIF resolution

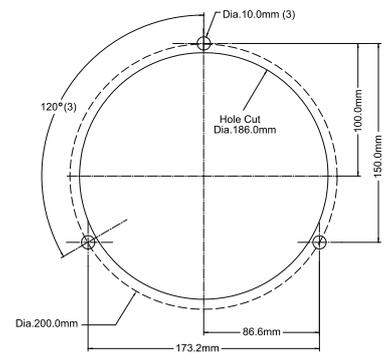
Dimensions - In-ceiling



In-Ceiling Dome

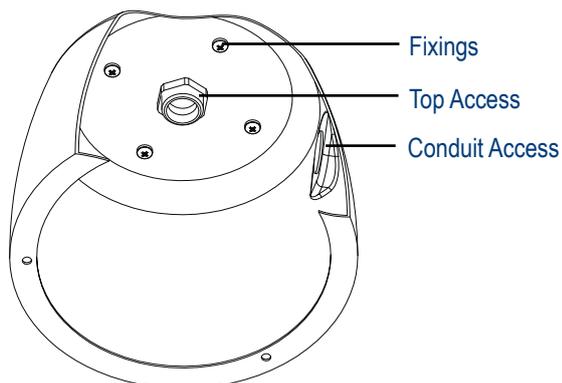


Plenum Rated Back Box

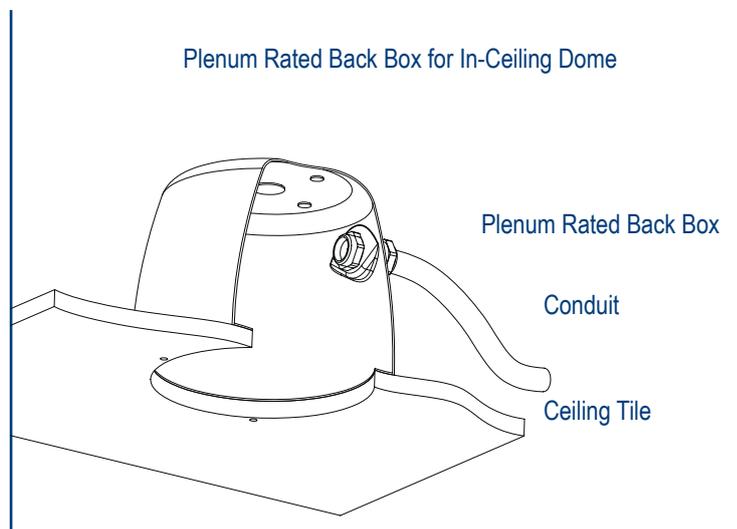


Hole Cutting Dimensions

Surface Mount for In-Ceiling Dome

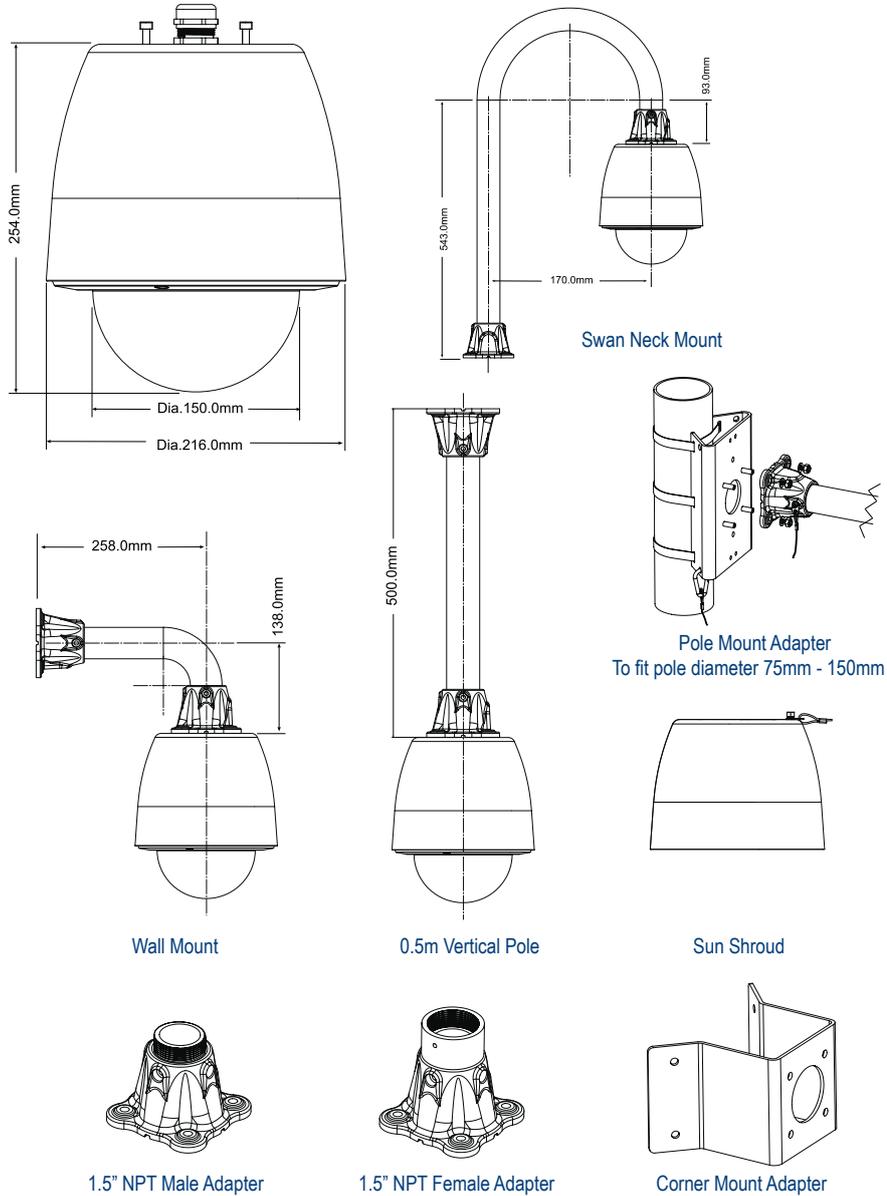


Plenum Rated Back Box for In-Ceiling Dome



Dimensions - Pendant Camera & Mounts

Mounts and accessories are separately orderable.



Mounts and Accessories	Order Code
In-Ceiling PTZ Plenum Rated Back Box	110097
In-Ceiling PTZ Surface Mount	110099
Pendant PTZ Dome Corner Mount Bracket	110082
Pendant PTZ Dome Wall Mount	110084
Pendant PTZ Dome Swan-Neck Mount	110085
Pendant PTZ Dome 0.5m Vertical Pole	110086
Pendant PTZ Dome Pole Mount Adapter	110096
Pendant PTZ Dome 1.5" NPT Adapter (Male)	110087
Pendant PTZ Dome 1.5" NPT Adapter (Female)	110088
Pendant PTZ Dome Clear Lens Cover	110080
Pendant PTZ Dome Dark Tint Lens Cover	110081
Pendant PTZ Dome Sun Shroud	110065

Specification

Optical																	
Zoom order options	18x optical + 12x digital	35x optical + 12x digital	36x optical + 12x digital														
Lens	4.1mm to 73.8mm, F1.4 to F3.0	3.4mm to 119mm, F1.4 to F4.2	3.4mm to 122.4mm, F1.6 to F4.5														
Scan Mode	Interlaced	Progressive or Interlaced	Interlaced														
Horizontal View Angle	2.8° to 48°	1.7° to 55.8°	1.7° to 57.8°														
Day/Night	Yes	Yes	Yes														
Wide dynamic range	Yes	Yes	Yes														
Image Stabilizer	No	Yes	No														
Min Sensitivity	F1.4, 50 IRE 0.07 lx at (color), 0.01 lx (mono) NTSC at 1/4 sec, PAL at 1/3 sec	F1.4, 35 IRE 0.05 lx (color), 0.01 lx (mono) NTSC at 1/4 sec, PAL at 1/3 sec	F1.6, 50 IRE 0.1 lx (color), 0.01 lx (mono) NTSC at 1/4 sec, PAL at 1/3 sec														
Resolution	>540 TVL	>540 TVL	>540 TVL														
General																	
Sensor	1/4 Sony ExView HAD, 752(H) x 582(V)																
Signal/noise ratio	>50 dB																
Shutter/Iris/Focus	Automatic with manual override																
Manual Shutter Speeds	1 to 1/10000 sec.																
White Balance/Gain/IR Filter	Automatic																
Binary Input/Output	2 opto-isolated inputs; 1 solid state, opto-isolated relay output																
Video Compression	Full frame rate, full color: H.264; (ISO 14496-10): 25/30fps guaranteed																
Video Bitrate	User configurable from 32Kbps to 6Mbps																
Multi-Streaming	Up to 16 simultaneous unicast video users plus unlimited multicast users																
Dual Encoding	<table border="0"> <thead> <tr> <th></th> <th>A</th> <th>B</th> <th></th> </tr> </thead> <tbody> <tr> <td>D1 / 4SIF</td> <td>1 Stream</td> <td>1 Stream</td> <td rowspan="3">Combine one selection from column A plus one selection from column B: e.g. 1x4SIF stream plus 2x2SIF streams</td> </tr> <tr> <td>2SIF</td> <td>2 Streams</td> <td>2 Streams</td> </tr> <tr> <td>SIF</td> <td>3 Streams</td> <td>3 Streams</td> </tr> </tbody> </table>				A	B		D1 / 4SIF	1 Stream	1 Stream	Combine one selection from column A plus one selection from column B: e.g. 1x4SIF stream plus 2x2SIF streams	2SIF	2 Streams	2 Streams	SIF	3 Streams	3 Streams
	A	B															
D1 / 4SIF	1 Stream	1 Stream	Combine one selection from column A plus one selection from column B: e.g. 1x4SIF stream plus 2x2SIF streams														
2SIF	2 Streams	2 Streams															
SIF	3 Streams	3 Streams															
Resolution	D1, 4SIF, 2SIF, SIF (PAL) D1, 4SIF, 2SIF, SIF (NTSC)																
Network Protocols	TCP, UDP, IGMP, SNMP, HTTP, FTP, NTP																
Network Interface	This camera complies with IEEE 802.3u, 100BASE-TX Fast Ethernet																
Network Security	Embedded Linux Firewall. Salted passwords, with MD5 encryption																
Time	Embedded real-time clock, NTP client																
Regulatory	EN 55022(1994) ITE emission standard Class A; EN 55024(1998) ITE immunity standard Class A; EN 61000-3-3(1995) voltage fluctuation EN 61000-3-2(1995) mains harmonics Class A; CFR47(1995) Part 15 subpart B; UL2044 (In-Ceiling with Plenum Rated Back Box)																
PTZ Control																	
Presets	250	Pan Range	360° continuous rotation														
Preset Accuracy	0.05°	Tilt Range	-5° (above horizon) to +90° (vertically down)														
Preset Tours	100 each with 20 presets	Pan/Tilt Speed	0.001°/s to 360°/s														
Pattern/Mimic Tours	4 each with up to 1 minute	Preset Move Speeds	200°/s														
Privacy Zones	24 User Defined	Picture Freeze Option	Yes														
Form Factor	In-Ceiling	Standard Pendant	Environmental Pendant														
Operating Voltage	24V AC/DC @ 1A	24V AC/DC @ 1A	24V AC/DC @ 2.3 A														
Power Consumption	24W; Surge protection 24V DC power supply included	24W; Surge protection 24V DC power supply included	55W; Surge protection 24V DC power supply included														
Weight	2.7 Kg	5.5 Kg	5.7 Kg														
Housing	Polypropylene	Vandal Resistant die-cast aluminium	Vandal Resistant die-cast aluminium														
Bubble Construction	Optical grade Polycarbonate	Optical grade Polycarbonate	Optical grade Polycarbonate														
Storage Temp	-20°C (-4°F) / +70°C (158°F)	-20°C (-4°F) / +70°C (158°F)	-20°C (-4°F) / +70°C (158°F)														
Sustained Min/Max Temperature	0°C (32°F) / +40°C (104°F)	-5°C (23°F) / +50°C (122°F)	-20°C (-4°F) / +50°C (122°F)														
Absolute Maximum Temperature	+45°C (133°F) for periods of 1 hour	+60°C (140°F) for periods of 1 hour	+60°C (140°F) for periods of 1 hour														
Ingress Protection	N/A	IP67	IP67														



IndigoVision

Complete IP Video Security Solutions



11000 Fixed HD Camera Range



Professional High Definition (HD), full frame rate Day/Night IP cameras

IndigoVision's 11000 range of HD, full frame rate Day/Night IP Cameras are designed to be used with the company's complete end-to-end IP Video solution. Class-leading H.264 compression technology and IndigoVision's guarantee never to drop a frame provide excellent video quality at low bandwidths.

The cameras can be ceiling or wall mounted and use a 1/3" Progressive Scan HD Sensor, guaranteeing excellent performance.

- Full HD 720p Resolution
- Full frame rate guaranteed
- Excellent image quality from 1/3" Progressive scan sensor
- Power-over-Ethernet for lower installation costs
- Built-in real time motion detection
- Day/Night IP Camera with optional full duplex audio



IndigoVision's cameras enable simple and easy deployment of IP based video systems as they only require a single CAT 5 cable for connection to the network. The built-in Power-over-Ethernet support allows the camera to be powered directly from the network, reducing installation costs.

IndigoVision's IP Video solution allows advanced features such as Activity Controlled Framerate (ACF) and camera based real-time motion detection to be deployed in the camera itself. These features reduce the bandwidth and NVR storage requirements during periods of scene inactivity.

Product Codes

11000 Fixed IP Camera (PAL Region)	Standard Lens		Standard Lens (Non IR)		Telephoto Lens		Telephoto Lens (Non IR)		Ultra Wide Lens	
	11000S	11000E	11000S	11000E	11000S	11000E	11000S	11000E	11000S	11000E
Day/Night, PoE	541277	561277	541237	561237	541239	561239	541231	561231	541271	561271
Day/Night with Audio, PoE	541275	561275	541235	561235	541279	561279	541233	561233	541273	561273

Default frame rate for PAL Region is 25fps and can be configured up to 30fps.

The 11000E product allows full frame rate video, at full 720p resolution. The 11000S product allows 1/3 frame rate video, at full 720p resolution.

11000 Fixed IP Camera (NTSC Region)	Standard Lens		Standard Lens (Non IR)		Telephoto Lens		Telephoto Lens (Non IR)		Ultra Wide Lens	
	11000S	11000E	11000S	11000E	11000S	11000E	11000S	11000E	11000S	11000E
Day/Night, PoE	541276	561276	541236	561236	541238	561238	541230	561230	541270	561270
Day/Night with Audio, PoE	541274	561274	541234	561234	541278	561278	541232	561232	541272	561272

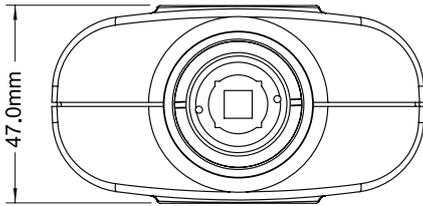
Default frame rate for NTSC Region is 30fps.

The 11000E product allows full frame rate video, at full 720p resolution. The 11000S product allows 1/3 frame rate video, at full 720p resolution.

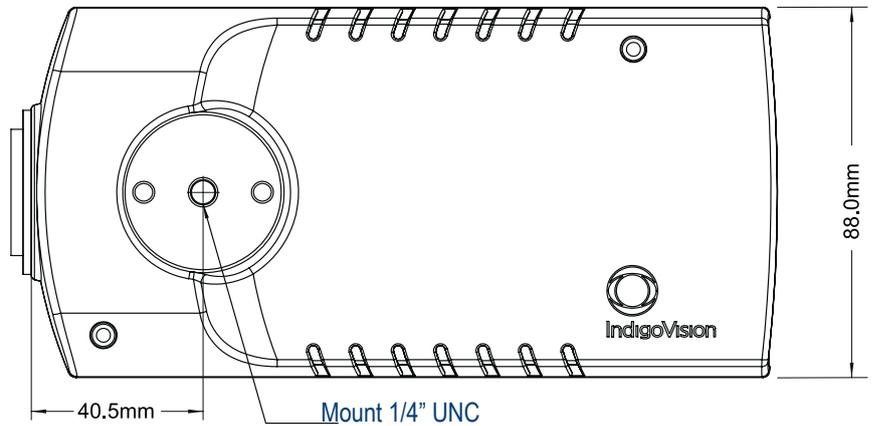
Lens Options	Focal Length	Horizontal View Angle	Max Aperture	Day/Night with IR Light Sources	Day/Night without IR Light Sources	Day Only
Standard Non IR Corrected	2.8-8mm	90.7° (W) 35.2° (T)	F1.2	X	✓	✓
Standard IR Corrected	3-8mm	100° (W) 35° (T)	F1.2	✓	X	X
Telephoto Non IR Corrected	5-50mm	51.7° (W) 5.3° (T)	F1.4	X	✓	✓
Telephoto IR Corrected	5-50mm	53.8° (W) 5.5° (T)	F1.6	✓	X	X
Ultra Wide IR Corrected	1.7mm	110°	F1.8	✓	✓	✓

When choosing a lens, lighting conditions should be considered as well as focal length. IR Corrected lenses should be used if night time scenes are illuminated by IR lights or halogen lights. If no IR lights are in use the non-IR Corrected lens will give superior video quality.

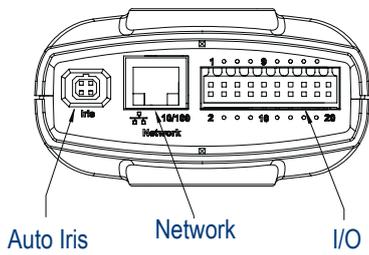
Dimensions



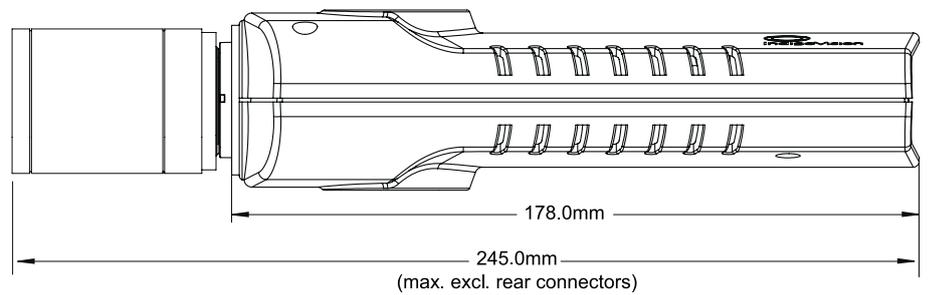
View on Front Face



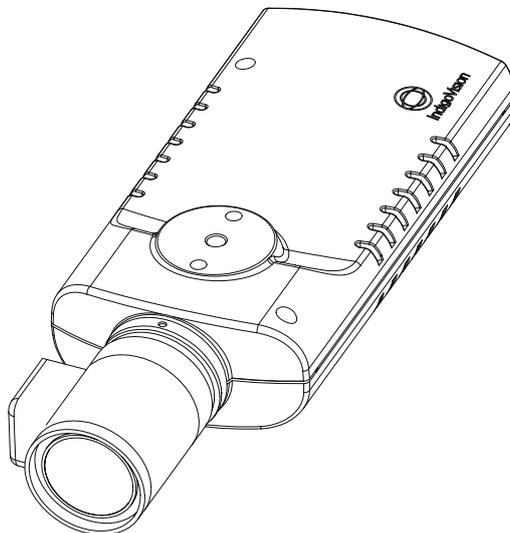
View on Top or Bottom Face



View on Back Face



View on Side



Specification

Camera Features		
Video Resolution	720p HD (1280 x 720 pixels), Widescreen 16:9	
Frame Rate	30 fps guaranteed	
Day/Night	True day/night with mechanical IR Cut Filter	
Minimum Sensitivity	Day: 0.9 Lux (50 IRE, F1.2, 1/30s shutter) Night: 0.1 Lux (50 IRE, F1.2, 1/15s shutter)	
Wide Dynamic Range	60dB	
Sensor	1/3" HD CCD, 2.5 Megapixel	
Gamma	Programmable, 0.45 default	
Gain Control	Automatic or fixed manual setting: 0 - 30 dB in 16 steps	
Scan Mode	Progressive Scan	
Mirror Mode	On or Off	
Flip Mode	On or Off	
Signal/Noise level	Better than 45dB	
Shutter Mode	Global	
Synchronization	Internal	
Back Light Compensation	On or Off	
White Balance	Auto or Fixed (Indoor, Outdoor) or Manual	
Iris Control	Auto-iris DC drive lens as standard	
Shutter Speeds	1/1 to 1/10,000 in 22 steps	
Video Compression	Full frame rate H.264 (ISO 14496-10) 30 fps guaranteed	
Video Bitrate Cap	256Kbps to 8Mbps per stream. User configurable	
Multi-Streaming	Up to 32Mbps total video output Unlimited multicast connections Up to four 8Mbps unicast connections Up to sixteen 1Mbps unicast connections	
Binary Input/Output	2 inputs; 1 solid state relay output	
Network Interface	RJ-45. IEEE802.3 and IETF standards: 10/100 Base-T Ethernet, TCP, UDP, IGMP, SNMP, HTTP	
Network Security	Embedded Linux firewall. Salted passwords with MD5 encryption	
Time	Embedded real-time clock, NTP client	
Regulatory	EN 55022 (1998) ITE emission standard – Class A EN 55024 (1998) +A1:2000 +A2:2003 ITE immunity standard CFR47(1995) Part 15 subpart B -Class A (US federal code of regulations)	EN 60068-2-1 & 2 (1993) Low & High temp EN 60068-2-6 & 64 (2008) Sinusoid & Random vibration EN 60068-2-29 (1993) Bump EN 60068-2-30 (2005) Humidity
Electrical	Operating voltage: Power over Ethernet (802.3af Class 0); 24V AC/DC @ 0.45A; Power consumption: 11W; 24V DC Power Supply separately orderable	
Operating Temperature	0 to +40°C/+32 to +104°F	
Audio Input*	Mono line in terminal block connector. Nominal voltage: 1V p-p, Mic 30mVp-p. Mic type: dynamic	
Audio Output*	Mono line out terminal block connector. 1V p-p, Minimum load impedance: 32 Ohms	
Audio Compression*	Full Duplex MPEG-4 Advanced Audio Encoding; 16 kHz sample rate; 16bit resolution. Selectable 32, 48, 64 Kbps bit-rate, 100 - 7000 Hz Bandwidth	
Housing	Diecast Aluminium Alloy	
Dimensions / Weight	175mm (d) x 88mm (w) x 45mm (h) / 0.5Kg	

*Audio available as an order option



IndigoVision

Complete IP Video Security Solutions



11000 HD PTZ IP Dome Cameras

HD PTZ Cameras with guaranteed full frame rate at astonishingly low bandwidths.

IndigoVision's range of HD PTZ Dome Cameras are designed to be used with the company's complete end-to-end IP Video Solution. Class leading H.264 compression technology provides outstanding video quality with astonishingly low bandwidths. Ultra-low latency gives operators sharp camera control, and every frame is guaranteed.

IndigoVision's IP Video solution allows advanced features such as Activity Controlled Framerate (ACF) and camerabased real-time analytics to be deployed in the camera itself. These features reduce the bandwidth and NVR storage requirements during periods of scene inactivity and allow the user to deploy advanced analytics to identify events as they occur in real-time.

- Low bandwidths: 2 Mbps typical
6 Mbps under full motion
- Progressive scan for stunning quality
on PC monitors
- H.264 HD full frame rate guaranteed
- Day/Night with Auto Mechanical IR filter
- 10x Optical Zoom + 12x Digital Zoom
- Wide range of mounts

Product Codes

11000 PTZ IP Camera (PAL Region)		10x Lens	
	11000S		11000E
In-Ceiling	541143		561143
Standard Pendant	541148		561148
Environmental Pendant	541149		561149

Default frame rate for PAL Region is 25fps and can be configured up to 30fps.

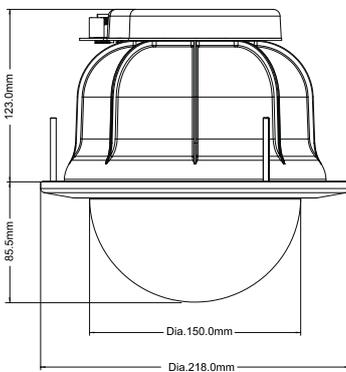
The 11000E product allows full frame rate video, at full 720p resolution. The 11000S product allows 1/3 frame rate video, at full 720p resolution.

11000 PTZ IP Camera (NTSC Region)		10x Lens	
	11000S		11000E
In-Ceiling	541142		561142
Standard Pendant	541146		561146
Environmental Pendant	541147		561147

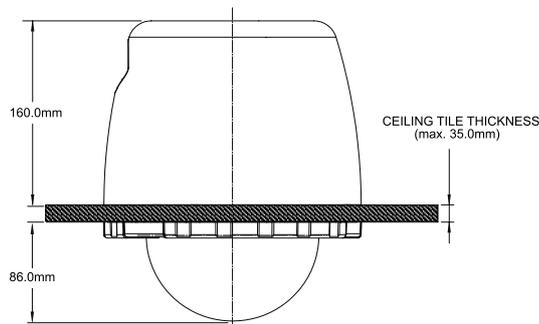
Default frame rate for NTSC Region is 30fps.

The 11000E product allows full frame rate video, at full 720p resolution. The 11000S product allows 1/3 frame rate video, at full 720p resolution.

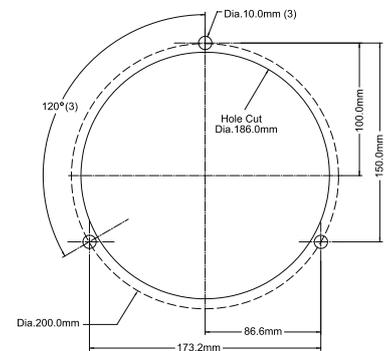
Dimensions - In-ceiling



In-Ceiling Dome

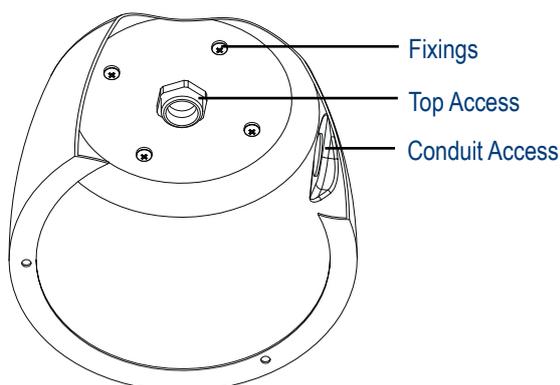


Plenum Rated Back Box

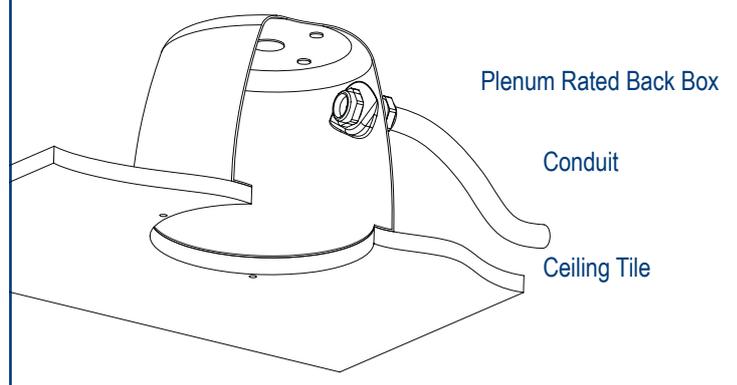


Hole Cutting Dimensions

Surface Mount for In-Ceiling Dome

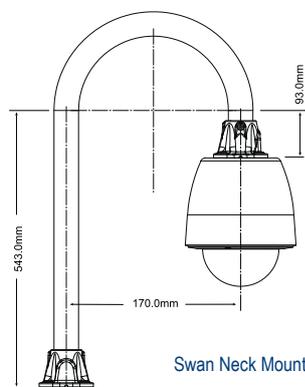
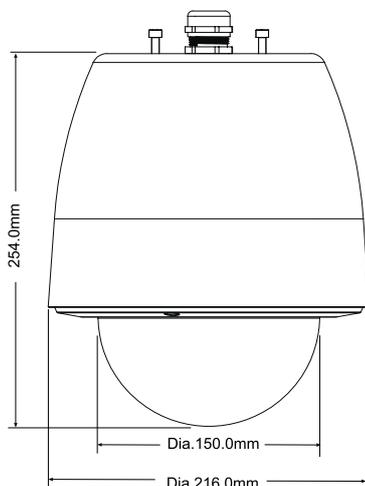


Plenum Rated Back Box for In-Ceiling Dome

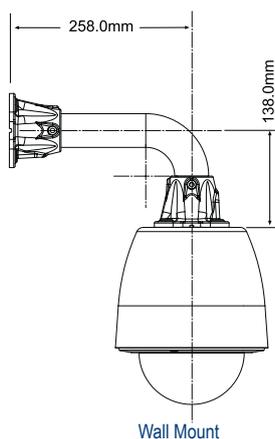


Dimensions - Pendant Camera and Mounts

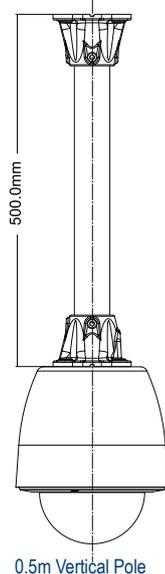
Mounts and accessories are separately orderable.



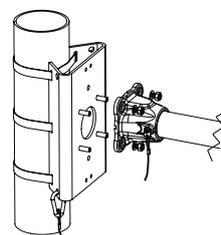
Swan Neck Mount



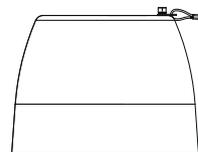
Wall Mount



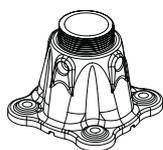
0.5m Vertical Pole



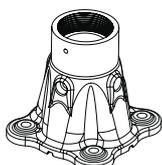
Pole Mount Adapter
To fit pole diameter 75mm - 150mm



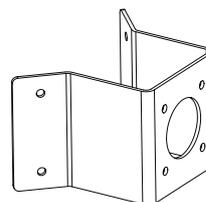
Sun Shroud



1.5" NPT Male Adapter



1.5" NPT Female Adapter



Corner Mount Adapter

Mounts and Accessories	Order Code
In-Ceiling PTZ Plenum Rated Back Box	110097
In-Ceiling PTZ Surface Mount	110099
Pendant PTZ Dome Corner Mount Bracket	110082
Pendant PTZ Dome Wall Mount	110084
Pendant PTZ Dome Swan-Neck Mount	110085
Pendant PTZ Dome 0.5m Vertical Pole	110086
Pendant PTZ Dome Pole Mount Adapter	110096
Pendant PTZ Dome 1.5" NPT Adapter (Male)	110087
Pendant PTZ Dome 1.5" NPT Adapter (Female)	110088
Pendant PTZ Dome Clear Lens Cover	110080
Pendant PTZ Dome Dark Tint Lens Cover	110081
Pendant PTZ Dome Sun Shroud	110065

Specification

General Specifications

Video Resolution	720p HD (1280 x 720 pixels), Widescreen 16:9
Frame Rate	30 fps guaranteed
Day/Night	True day/night with mechanical IR Cut Filter
Min Sensitivity	Day: 1.0 Lux (30 IRE, F1.8, 1/15s shutter) Night: 0.1 Lux (30 IRE, F1.8, 1/15s shutter)
Sensor	1/3" HD CMOS, 2 Megapixel
Zoom	10x optical + 12x digital
Lens	5.1mm to 51mm, F1.8 to F2.1, Autofocus with manual override
Scan Mode	Progressive
Horizontal View Angle	5.4° to 50°
Dynamic Range	> 50dB
Electronic shutter Speed	1/2 to 1/10000 sec. (21 steps)
Auto gain control	Auto/Manual (0 to +18 dB)
Exposure control	Full auto, Shutter-priority, Iris-priority, Manual, Backlight compensation
Binary Input/Output	2 opto-isolated inputs; 1 solid state opto-isolated relay output
Video Compression	Full frame rate H.264 (ISO 14496-10); 30 / 25 fps guaranteed
Video Bitrate Cap	256Kbps to 8Mbps per stream. User configurable
Multi-Streaming	Up to 32Mbps total video output Unlimited multicast connections Up to four 8Mbps unicast connections Up to sixteen 1Mbps unicast connections
Network Protocols	TCP, UDP, IGMP, SNMP, HTTP, FTP, NTPI
Network Interface	This camera complies with IEEE 802.3u 100BASE-TX Fast Ethernet
Network Security	Embedded Linux firewall. Salted passwords, with MD5 encryption
Time	Embedded real-time clock, NTP client
Console Port	RS232
Regulatory	EN 55022(1994) ITE emission standard Class A; EN 55024(1998) ITE immunity standard Class A; CFR47(1995) Part 15 subpart B EN 61000-3-2(1995) mains harmonics Class A; EN 61000-3-3(1995) voltage fluctuation

PTZ Control

Presets	250	Pan Range	360° continuous rotation
Preset Accuracy	0.05°	Tilt Range	-5° (above horizon) to +90° (vertically down)
Preset Tours	100 each with 20 presets	Pan/Tilt Speed	0.001°/s to 360°/s
Pattern/Mimic Tours	4 each with up to 1 minute	Preset Move Speeds	200°/s
Picture Freeze Option	Yes		

Form Factor

In-Ceiling

Standard Pendant

Environmental Pendant

Form Factor	In-Ceiling	Standard Pendant	Environmental Pendant
Operating Voltage	24V AC/DC @ 1A	24V AC/DC @ 1A	24V AC/DC @ 2.3A
Power Consumption	24W; Surge protection 24V DC 24V DC power supply included	24W; Surge protection 24V DC power supply included	55W; Surge protection 24V DC power supply included
Weight	2.7Kg	5.5Kg	5.7Kg
Housing	Polypropylene	Vandal resistant die-cast aluminium	Vandal resistant die-cast aluminium
Bubble Construction	Optical grade polycarbonate	Optical grade polycarbonate	Optical grade polycarbonate
Storage Temp	-20°C (-4°F) / +70°C (158°F)	-20°C (-4°F) / +70°C (158°F)	-20°C (-4°F) / +70°C (158°F)
Sustained Min/Max Temperature	0°C (32°F) / +40°C (104°F)	-5°C (23°F) / +45°C (113°F)	-20°C (-4°F) / +45°C (113°F)
Absolute Maximum Temperature	+45°C (113°F) for periods of 1 hour	+55°C (131°F) for periods of 1 hour	+55°C (131°F) for periods of 1 hour
Ingress Protection	NA	IP67	+55°C (131°F)





IndigoVision

Complete IP Video Security Solutions



HD Minidome Range

Seamless Open Standard HD Video

IndigoVision's HD Minidomes form part of our end-to-end IP video security solution, fully integrated with IndigoVision's SMS4 management software and Network Video Recorders.

The HD Minidome family provides an Open Standards solution while retaining the resilience of IndigoVision's unique distributed serverless architecture, with no bottlenecks and no single-point-of-failure.

- 2 Megapixel HD Progressive Scan
- Auto-Focus and Remote Zoom available
- Audio and Built-in Microphone options
- ONVIF Conformant
- H.264 Compression with up to 30fps
- Day/Night with Auto Mechanical IR filter



IndigoVision's HD Minidome range is ideally suited to a Multicast environment allowing an unlimited number of users to view live video on the network.

A powerful Auto-focus and zoom feature is available as an option. This enables the camera lens to be remotely driven on-demand by any authorized user from anywhere on the IP network, simplifying installation and reducing on-going cost of ownership.



HD Microdome



HD Internal Minidome



HD Vandal Resistant Minidome

Camera Product Codes

HD Minidome	Standard Lens		Standard Lens with remote Zoom and Focus	
	PAL Region*	NTSC Region	PAL Region*	NTSC Region
Internal Microdome	511707	511706	N/A	N/A
External Microdome	511709	511708	N/A	N/A
Internal Minidome	511717	511716	511719	511718
Vandal Resistant Minidome	511737	511736	511739	511738

* Default frame rate for PAL Region is 25fps, configurable up to 30fps.

Recording Codes

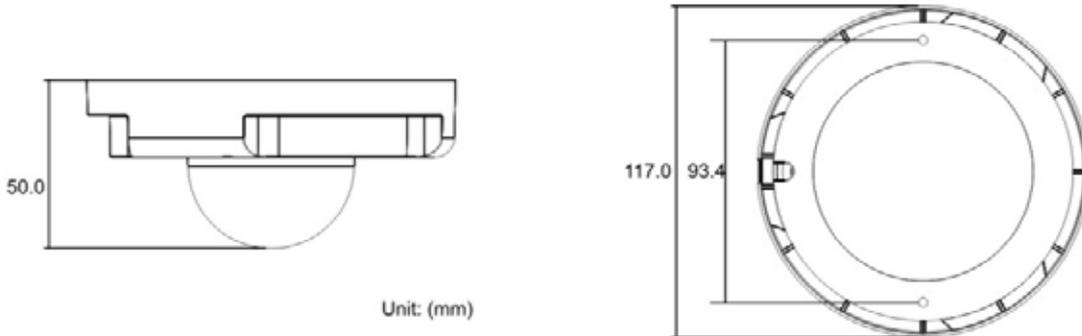


The camera range conforms to the ONVIF Standard and can be recorded to any of the IndigoVision NVR-AS range. Licenses for recording can be purchased separately.

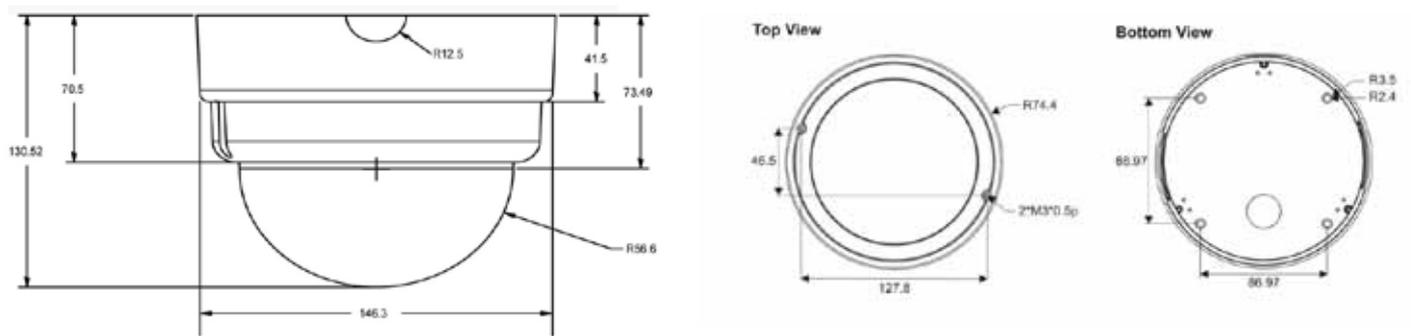
Number of Channels	1	5	10	20	40	64	100	200	Additional 1-Channel
NVR-AS 3000 Recording	314001	314005	314010	314020	314040	314063	N/A	N/A	314551
Windows NVR-AS Recording*	312001	312005	312010	312020	312040	312065	312100	312200	312551

*Recording of IndigoVision HD Minidomes requires a USB license dongle for each Windows recording server. The Windows NVR-AS software is included on the SMS4 management software CD, **product code: 317802**

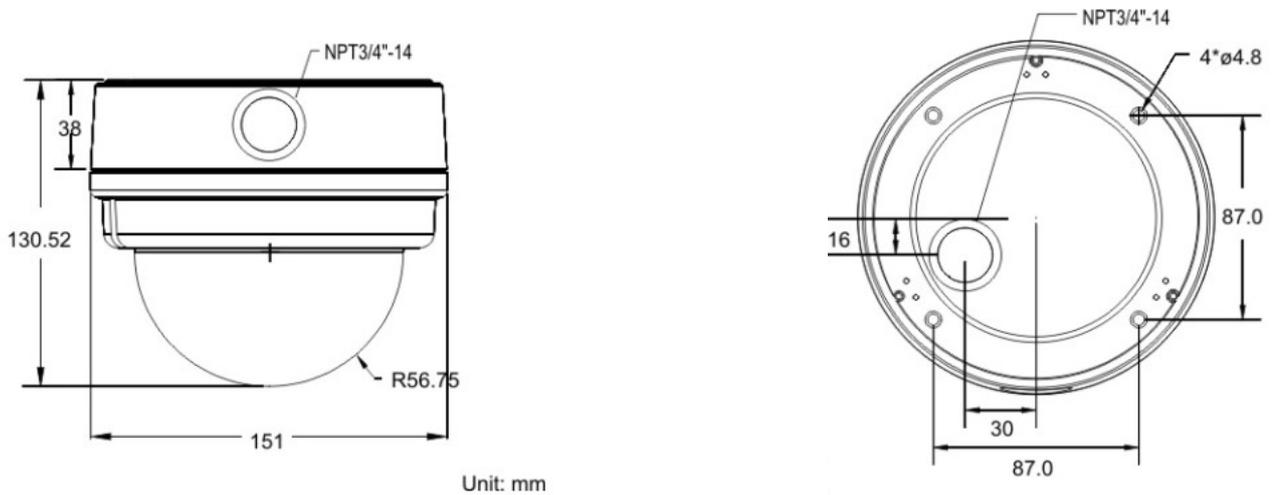
Dimensions - Microdome (Internal / External)



Dimensions - Internal Minidome



Dimensions - Vandal Resistant Minidome



Specification

Camera Features

Image Sensor	1/2.7" Progressive CMOS												
Active Pixels	2 Megapixel												
Gain Control	Automatic or fixed manual setting across a 40dB range												
Dynamic Range	69dB												
WDR	WDR function												
Mirror Mode	On or Off												
Back Light Compensation	On or Off												
White Balance Mode	Auto; Manual; ATW												
Shutter Speeds	1 to 1/10000 sec												
Video Compression	Full frame rate, full color: H.264/MJPEG ; up to 30fps												
Video Bit Rate	User-configurable bit rates from 64Kbps up to 8Mbps												
Multi-streaming	<table border="1"> <thead> <tr> <th>Stream 1</th> <th>Stream 2</th> <th>Framerate</th> </tr> </thead> <tbody> <tr> <td>1080p</td> <td>D1</td> <td>@ 30fps</td> </tr> <tr> <td>1080p</td> <td>1080p</td> <td>@ 15fps</td> </tr> <tr> <td>720p</td> <td>720p</td> <td>@ 30fps</td> </tr> </tbody> </table>	Stream 1	Stream 2	Framerate	1080p	D1	@ 30fps	1080p	1080p	@ 15fps	720p	720p	@ 30fps
Stream 1	Stream 2	Framerate											
1080p	D1	@ 30fps											
1080p	1080p	@ 15fps											
720p	720p	@ 30fps											
Resolution	1080p: 1920 x 1080 pixels; 720p: 1280 x 720 pixels; D1: 720 x 480 pixels												
Network interface	IEEE802.3 and IETF standards: 10/100 Base-T Ethernet, TCP, UDP, ICMP, IGMP, SNMP, HTTP Up to 2 simultaneous unicast video users or unlimited multicast users												
Time	Embedded real-time clock, NTP client												
Regulatory	EN 55022(1998) ITE - Class A; EN 55024(1998) ITE immunity standard; CFR47(1995) Part 15 subpart B -Class A												
IndigoVision System Software Requirements	SMS4 r3 or later												

	Internal	External
Sensitivity (30IRE, F1.5)	Day only: 0.1 lux	
Lens Options	Standard: 4mm, Horizontal view angle 78°, F1.5; fixed iris	
ICR Filter / Day/Night	Day only	
Gimbal Adjustment	2 axis adjustment	
Electrical	Operating voltage: Power over Ethernet (802.3af Class 0); Power consumption: 3.5W	
Audio	Built in microphone	N/A
Housing	Polycarbonate/ABS Alloy with Polycarbonate dome	Polycarbonate/ABS Alloy with Polycarbonate dome
Dimensions/Weight	117mm (dia.) x 50mm (h)/180g	117mm (dia.) x 50mm (h)/180g
Ingress Protection	N/A	IP65
Operating Temperature	0 to 50°C/+32 to +122°F	-10 to 50°C/+14 to 122°F
Mounting Options	Ceiling Mountable including solid surfaces	Ceiling Mountable including solid surfaces

	Internal	Vandal Resistant
Sensitivity (30IRE, F1.2)	Day: 0.2 lux; Night: 0.02 lux	
Lens Options	Standard: 3mm - 9mm, Horizontal view angle 103.5° (W) 34.3° (T) , F1.2, Vari-focal, M14 mount Standard: 3mm - 9mm, Horizontal view angle 103.5° (W) 34.3° (T) , F1.2, Vari-focal, M14 mount with Remote Zoom/Focus	
ICR Filter / Day/Night	Mechanical IR Cut Filter	
Gimbal Adjustment	3 axis adjustment	
Iris Control	Auto-iris DC drive lens as standard	
Video Output	NTSC/PAL composite video, 75 Ohms 1V p-p	
Audio Input	Line in, Mic in	
Audio Output*	Line out	
Binary Input/Output*	1 input ; 1 solid state opto-isolated relay output	
Electrical	Operating voltage: Power over Ethernet (802.3af Class 0) or 12V DC / 24V AC; Power consumption: 5.5W	
Housing	Injection Moulded Polycarbonate/ABS Alloy with Polycarbonate dome	Diecast Aluminium Alloy with Polycarbonate dome
Dimensions/Weight	147mm (dia.) x 131mm (h)/0.7Kg	151mm (dia.) x 131mm (h)/0.7Kg
Ingress Protection	N/A	IP65
Operating Temperature	0 to 50°C/+32 to +122°F	-10 to 50°C/+14 to 122°F
Mounting Options	Wall and Ceiling Mountable including solid surfaces	Wall and ceiling Mountable including solid surfaces

* Not currently supported in IndigoVision SMS4



ID: MINI-FD 11.2
NOV 11



IndigoVision

Complete IP Video Security Solutions



Network Video Recorders

NVR-AS 3000 Series

Powerful and integrated recording and playback system

IndigoVision offers a suite of NVRs to suit your requirements. Our family of Network Video Recorders provide powerful and integrated recording and playback system for video and audio from IP cameras and transmitters, with a choice of integrated or removable disks.

IndigoVision's standalone Network Video Recorder and Alarm Servers (NVR-AS) provide reliable storage for all your video and alarms. Located at any point on the network, operation can continue without the need for management software or a central server to be running, providing a truly scalable and reliable system.

- Record and playback MPEG-4 and H.264 video and audio streams
- Simultaneous full frame rate recording of up to 64 streams plus playback of up to 20 streams
- Redundant power and network connections
- Optional RAID storage resilience
- Low power / cost of ownership

The IndigoVision NVR-AS 3000 products can be remotely managed and configured using an intuitive web-based configuration interface which forms part of IndigoVision's Security Management Software (SMS 4). All models can record up to 64 cameras at full frame rate, with audio, and simultaneously play back up to 20 cameras, with extremely low power consumption, heat dissipation and equipment footprint.

Various storage capacities and different levels of RAID resilience are available from either integrated fixed disks or hot-swappable removable drives. All the NVR-AS 3000s use the latest hard drive technology, with specialised disks that have been developed for video surveillance applications. The disks are covered by a 3 year warranty. Fully redundant Gigabit Ethernet connections and provision for redundant power supplies come as standard on both the fixed disk and RAID array units.

Product Codes

NVR-AS 3000 RAID Array with 4x Hard Disks



	RA1500 RAID 5	RA3000 RAID 5	RA6000 RAID5	RA1000 RAID 1	RA2000 RAID 1	RA4000 RAID1	RA2000 RAID 0	RA4000 RAID 0
Product Code	980396	980397	980398	980386	980387	980388	980376	980377

Caddies Including Disks	500GB	1000GB	2000GB
Product Code	980005	980010	980020

NVR-AS 3000 with Fixed Disks



	FD1000	FD2000
Product Code	980306	980307

NVR-AS 3000 ONVIF Recording License



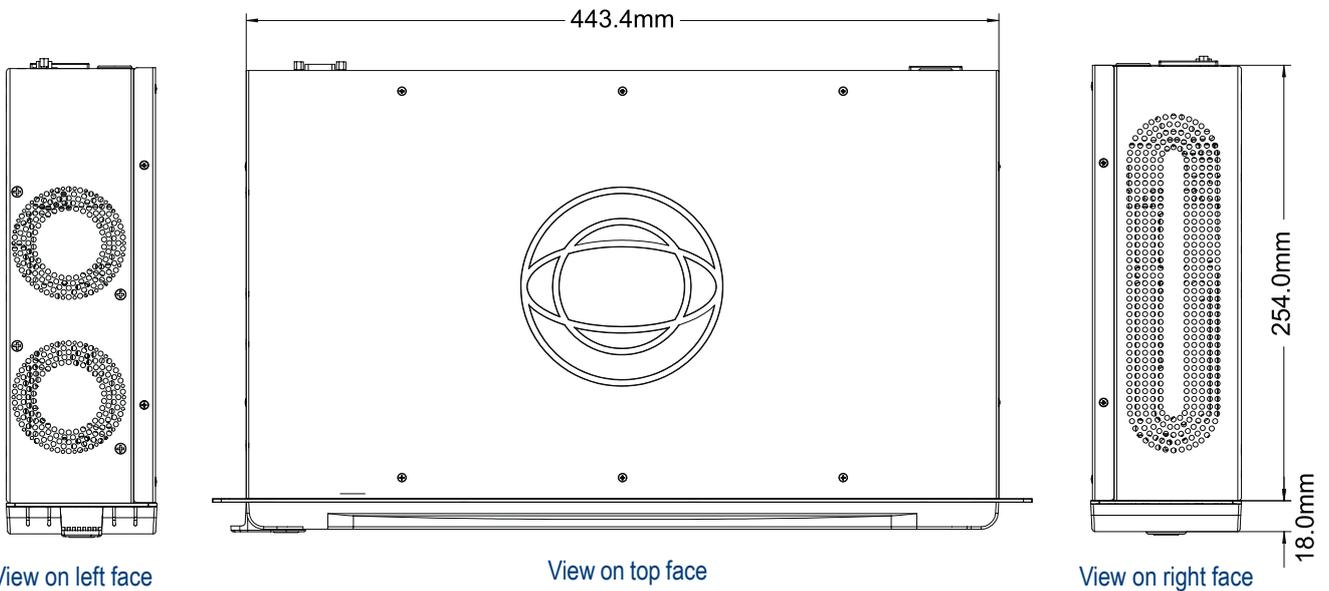
	5-Channel	10-Channel	20-Channel	40-Channel	64-Channel	Additional 5-Channel
Product Code	311005	311010	311020	311040	311064	311555

Dimensions

All NVR-AS 3000 RA and FD variants have the same 2U high, 19" rack housing design.



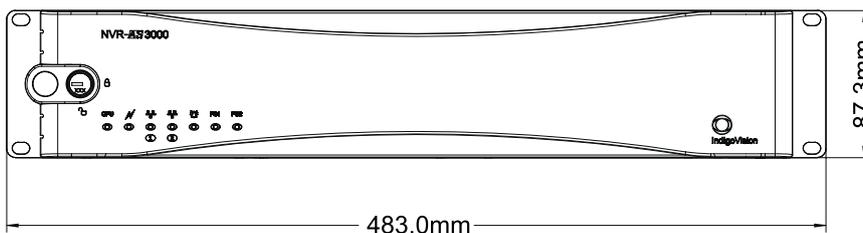
View on back face



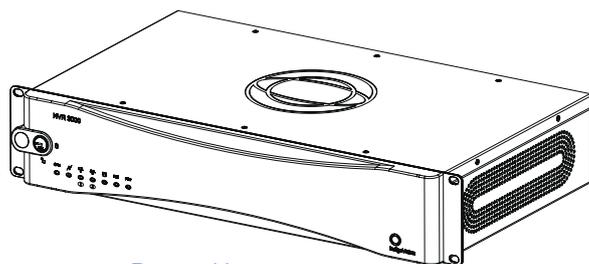
View on left face

View on top face

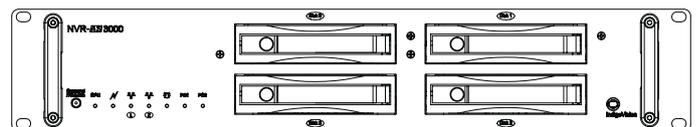
View on right face



View on front face



Removable
Lockable Fascia



RA series with Fascia removed



FD series with Fascia removed

Specification

General Specifications

Electrical	Operating Voltage: Input 100-240V ~ 47-63Hz 1A. Connector for redundant external power supply
Network Connections	Two redundant 100/1000 BaseT RJ-45 Connections
Environmental	Operating temp: 0° to 50°C / 32° to 122°F; Storage temp: -20° to +70°C / -4° to +158°F
Network Interface	TCP, UDP, ICMP, IGMP, SNMP, HTTP, NTP, Telnet, FTP
Network Security	Embedded Linux firewall. Salted passwords with MD5 encryption
Onboard Diagnostics	Disk, CPU, Motherboard temperatures. Redundant power and network status. Cooling fan status
Regulatory	EN55022 ITE Emission standard Class A; EN61000-3-2 Mains Harmonics Class A; EN61000-3-3 Voltage Fluctuation; EN55024 ITE Immunity standard; CFR47: 2002 Part 15 Sub Part B (US federal code of regulations) UL 60950-1, Information Technology Equipment - Safety - Part 1: General Requirements CSA C22.2 No. 60950 - 1 - 07, Information Technology Equipment - Safety Part 1: General Requirements
Disks	SATA Seagate SV35.5 Series optimised for 24x7 video storage. 3-year warranty

NVR-AS 3000 with 4x Hard Disks RAID Array	RA1500 RAID 5	RA3000 RAID 5	RA6000 RAID5	RA1000 RAID 1	RA2000 RAID 1	RA4000 RAID1	RA2000 RAID 0	RA4000 RAID 0
Network Redundancy	Y	Y	Y	Y	Y	Y	Y	Y
Redundant Power Supply	Y	Y	Y	Y	Y	Y	Y	Y
Removable Storage	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
Disk Space (GB)	1500	3000	6000	1000	2000	4000	2000	4000
Available Storage (GB)	1458	2943	5913	963	1953	3933	1953	3933
Max. Recording Streams	64	64	64	64	64	64	64	64
Max. Playback Streams	20	20	20	20	20	20	20	20
Max. Recording Bitrate	40 Mbps	40 Mbps	40 Mbps	64 Mbps	64 Mbps	64 Mbps ⁺	64 Mbps	64 Mbps
Max. Playback Bitrate	40 Mbps	40 Mbps	40 Mbps	40 Mbps	40 Mbps	40 Mbps	40 Mbps	40 Mbps
Power Consumption	53W max							
Physical Dimensions	483x272x87mm (2U); Weight: 8.2 Kg							

*During RAID rebuild the Recommended Max. Recording Bitrate is 40Mbps to reduce rebuild times

*Removable as a RAID set

NVR-AS 3000 with Fixed Disks	FD1000	FD2000
Network Redundancy	Y	Y
Redundant Power Supply	Y	Y
Removable Storage	N	N
Disk Space (GB)	1000	2000
Available Storage (GB)	963	1953
RAID	RAID 0	RAID 0
Max. Recording Streams	64	64
Max. Playback Streams	20	20
Max. Recording Bitrate	64 Mbps	64 Mbps
Max. Playback Bitrate	40 Mbps	40 Mbps
Power Consumption	39W max	
Physical Dimensions	483x272x87mm (2U); Weight: 5.5 Kg	

Examples of Recording Duration in Days

This table estimates the number of days recording on an RA4000 model (4TB storage) with different numbers of cameras assuming full frame rate, 4SIF, H.264 video at a maximum bitrate of 2Mbps. As IndigoVision transmitters only use required bandwidth, the actual recording capacity may be more or less than shown.

Motion Level	20 cameras	40 cameras	64 cameras
Occasional	170 days	85 days	50 days
Intermittent	34 days	17 days	10 days
Frequent	18 days	9 days	5 days





IndigoVision

Complete IP Video Security Solutions



Network Video Recorders Compact NVR-AS 3000 Series

Powerful and integrated recording and playback system for video and audio from IP cameras and transmitters.

The Compact NVR-AS 3000 range offers a small footprint ideal for installation outside of traditional machine rooms. The family provides a powerful and integrated recording and playback system for video and audio from IndigoVision and ONVIF conformant cameras and transmitters.

Able to withstand temperature ranges of 0° to 60°C (32° to 140°F), it can be mounted horizontally or vertically and can be located at any point on a network allowing recording and playback across multiple sites regardless of location. Remote NVR management and configuration is performed using an intuitive web-based configuration interface which forms part of IndigoVision's SMS4 management software.

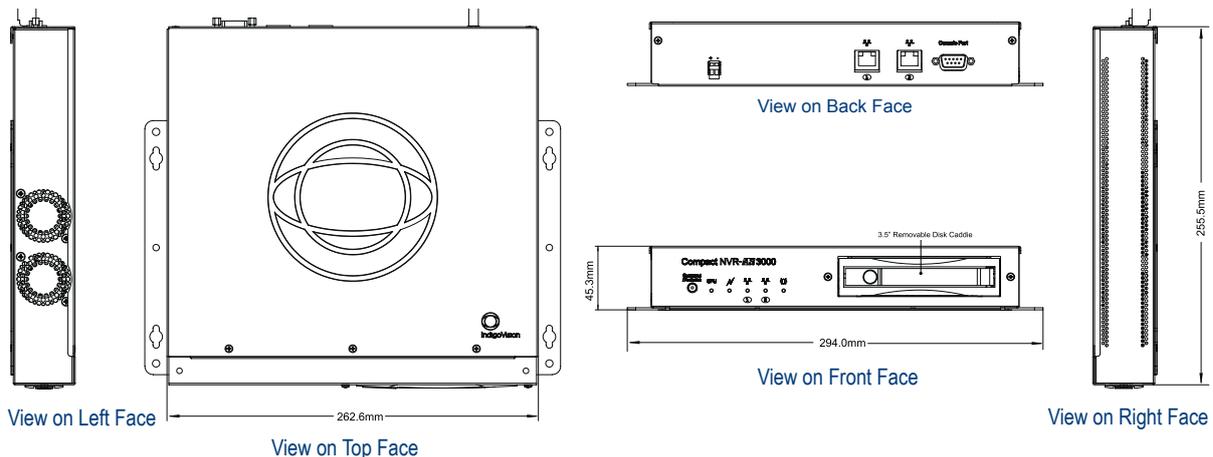
A choice of storage size is offered in a single removable disk and a system can deploy as many NVRs as required.

- Record and playback MPEG-4 and H.264 video and audio streams
- Simultaneous full frame rate recording of up to 20 streams plus playback of up to 20 streams
- Removable disk for easy archive or securing of evidence
- 3-Year Disk Warranty
- ONVIF Conformant

Specification

Model	RD500	RD1000
Removable Storage	Y	Y
Disc Space (GB)	500	1000
Available Storage (GB)	468	963
Physical Dimensions	263x255x45mm, 2.2 Kgs	
Streams	Up to 20 recording streams plus simultaneous playback of up to 20 streams	
Max. Network Throughput	40 Mbps recording with simultaneous 40 Mbps playback	
Electrical	Operating Voltage: Input 100-240V ~ 47-63Hz 1A; Power consumption: 32W (max) 12V DC power supply included Operating Voltage: Input 100-240V ~ 47-63Hz 1A; Power consumption: 32W (max) 12V DC power supply included	
Network Connections	100/1000 BaseT RJ-45	
Environmental	Operating temp: 0° to 60°C/32° to 140°F; Storage temp: -20° to +70°C/-4° to +158°F	
Network Interface	TCP, UDP, ICMP, IGMP, SNMP, HTTP, NTP, Telnet, FTP	
Network Security	Embedded Linux firewall. Salted passwords with MD5 encryption	
Regulatory	EN55022 ITE Emission standard Class A; EN61000-3-2 Mains Harmonics Class A; EN61000-3-3 Voltage Fluctuation; EN55024 ITE Immunity standard; CFR47: 2002 Part 15 Sub Part B (US federal code of regulations)	
Disk	SATA Seagate SV35.5 Series optimised for 24x7 video storage. 3-year warranty	
Standards	ONVIF Conformant	
Redundancy	Dual redundant switch ports	

Dimensions



Examples of Recording Duration in Days

This table estimates the number of days recording on an RD1000 model (1TB storage) with different numbers of cameras assuming full frame rate, 4SIF, H.264 video at a maximum bitrate of 2Mbps. As IndigoVision transmitters only use required bandwidth, the actual recording capacity may be more or less than shown. For more accurate estimates, please see the IndigoVision website or contact IndigoVision's Partner Support.

Motion Level	5 Cameras	10 Cameras	20 Cameras
Occasional	160 days	80 days	40 days
Intermittent	36 days	18 days	9 days
Frequent	16 days	8 days	4 days

Product Codes

	RD500	RD1000
Product Code	980106	980107

NVR-AS 3000 ONVIF Recording License



	5-Channel	10-Channel	20-Channel	40-Channel	64-Channel	Additional 5-Channel
Product Code	311005	311010	311020	311040	311064	311555



ID: IV-CNVR 11.1
AUG 11



IndigoVision

Complete IP Video Security Solutions



Windows Network Video Recorder

Your route to scalable recording

Network Video Recorder and Alarm Servers (NVR-AS) provide reliable storage for all your video and alarms across the network. Recording and alarm management can be distributed across the network without the need for a central server, providing a truly scalable and reliable system.

IndigoVision offers a suite of NVR-AS to suit your requirements. Our Windows NVR-AS runs on server operating systems providing virtually limitless recording using DAS, NAS or SAN.

IndigoVision NVR-AS can be located at any point on a network allowing recording, playback and alarm handling across multiple sites regardless of location. A system can deploy as many NVRs as required.

- Record and playback video and audio streams from IndigoVision and 3rd Party ONVIF devices
- Supports internal disks, internal RAID array, SCSI RAID array, iSCSI and Fibre Channel SAN and NAS
- Full frame rate recording of up to 200 cameras with simultaneous playback of up to 25 streams
- Powerful and distributed alarm management

Specification

Features

Supported Operating Systems	Windows Server 2003 x64, Windows Server 2003, Windows XP Professional, Windows Server® 2008 R2
Video	Simultaneously record and playback full frame rate, full resolution video streams from any IndigoVision IP Camera or Transmitter. Record and playback from ONVIF conformant devices
Audio*	Recording and playback of MPEG-4 AAC and G.711 audio
Thumbnails*	Indexed recordings for rapid display of time, alarm or motion based thumbnails
Alarms	Recording and logging of alarms
Bookmarks*	Recording and logging of bookmarks in association with recordings
Analytics*	Recording and playback of motion analysis data from cameras
Storage Systems Supported	Internal disks, internal RAID array, SCSI RAID array, iSCSI and Fibre Channel SAN and NAS
Redundancy and Failover	Supports sophisticated failover and mirroring strategies amongst multiple NVRs for increased resilience
Automatic Storage Management	Policy based management options to control space and/or time based reaping of old recordings
Security	Recordings can be protected to prevent deletion and exported including secure watermark to prevent evidence tampering
Performance	Simultaneous record up to 200 video streams plus playback of up to 25 streams

*Features may vary based on capabilities of camera model

NVR-AS PC Hardware Requirements

Your NVR PC should conform to the following minimum hardware specifications, depending on the number of streams you intend to record:

Number of 1Mbps recording streams	Network Card	Hard Disk Type	CPU Power Required	OS
16	100Base-T	SATA (Min 1 disk)	Intel Pentium 4 1.4Ghz	Windows XP Professional
32	1000Base-T	SATA RAID (Min 4 disks)	Intel Pentium 4 1.4Ghz	Windows Server 2003
100	1000Base-T	SATA RAID (Min 4 disks)	Intel Xeon 5140 Dual Core	Windows Server 2003 x64
200	1000Base-T	SATA RAID (Min 8 disks)	Intel Xeon 5140 Dual Core	Windows Server 2003 x64

The NVR-AS PC is recommended to be server class with a quad-core processor, 4GB of system memory and 40GB of a local system disk space running Windows Server 2008 R2.

Product Codes

Number of Channels	1	5	10	20	40	64	100	200	Additional 1 stream	Multivolume Unlimited
8000,9000 & 11000 IndigoVision Devices	N/A	N/A								
License Dongle	312001	312005	312010	312020	312040	312064	312100	312200	312551	312700

No recording licenses required for recording of IndigoVision 8000,9000 or 11000 devices. Recording of IndigoVision HD Minidomes or 3rd party ONVIF devices requires a USB license dongle for each recording server. The Windows NVR-AS software is included on the SMS4 management software CD, **product code: 317802**



IndigoVision

Complete IP Video Security Solutions



4-Channel Rack

A family of IP Video Transmitters and Receivers incorporating IndigoVision's class-leading compression technology

IndigoVision's 4-Channel Rack is designed to be used with the company's complete end-to-end IP Video solution and have class-leading MPEG-4 or H.264 compression technology built-in.

The units allow traditional analog CCTV cameras and video monitors to be integrated into an IP network. The 4-Channel Rack can take any combination of Receiver or Transmitter cards. All products have a range of digital I/O for PTZ control and alarm integration.

IndigoVision's IP Video solution allows advanced features such as Activity Controlled Framerate (ACF) and real-time analytics, available as an order option, to be deployed in the Transmitters. These features reduce the bandwidth and NVR storage requirements during periods of scene inactivity and allow the user to deploy advanced analytics to identify events as they occur in real-time.

- Class-leading MPEG-4 or H.264 compression
- Full frame rate, 25/30fps guaranteed
- Incorporates local switch for direct attachment to NVR
- Optional full duplex audio
- Optional built-in real time analytics

Specification

General Specifications														
Video Performance	Full frame rate, full color: 25/30fps guaranteed													
Video Compression	9000 Series: H.264 (ISO14496-10) 8000 Series: MPEG-4 (ISO14496-2)													
Audio Compression*	MPEG-4 Advanced Audio Encoding at 16 KHz sample rate & 16 bit resolution													
Video Bit Rate	User-configurable bit rates from 32Kbps up to 6Mbps													
9000 Multi-streaming	<table border="0"> <tr> <td></td> <td>A</td> <td>B</td> <td rowspan="4">You can combine one selection from column A plus one selection from column B: e.g. 2x2SIF streams plus 3xSIF streams e.g. 1x4SIF stream plus 1x4SIF stream</td> </tr> <tr> <td>4SIF</td> <td>1 Stream</td> <td>1 Stream</td> </tr> <tr> <td>2SIF</td> <td>2 Streams</td> <td>2 Streams</td> </tr> <tr> <td>SIF</td> <td>3 Streams</td> <td>3 Streams</td> </tr> </table>		A	B	You can combine one selection from column A plus one selection from column B: e.g. 2x2SIF streams plus 3xSIF streams e.g. 1x4SIF stream plus 1x4SIF stream	4SIF	1 Stream	1 Stream	2SIF	2 Streams	2 Streams	SIF	3 Streams	3 Streams
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4SIF	1 Stream	1 Stream												
2SIF	2 Streams	2 Streams												
SIF	3 Streams	3 Streams												
8000 Multi-streaming	SIF: 3 streams; 2SIF: 2 streams; 4SIF: 1 stream													
Resolution	4SIF: 704 x 576 pixels 2SIF: 704 x 288 pixels SIF: 352 x 288 pixels (PAL) 4SIF: 704 x 480 pixels 2SIF: 704 x 240 pixels SIF: 352 x 240 pixels (NTSC)													
Video Output	NTSC/PAL composite video, 75 Ohms; 1V p-p, standard BNC connector. Software decode for display to PCs													
Video Input	NTSC/PAL video; 75 Ohms 1V p-p, standard BNC connector													
Data Input/Output	4 Data ports: RS232/RS422/RS485 up to 115.2 Kbps; 4 Console ports: RS232 up to 115.2 Kbps													
Audio Input*	Line in 3.5mm jack. Nominal voltage: 1V p-p, 16bit, 16kHz sampling; Mic 30mVp-p. Mic types: support for condensor and dynamic													
Audio Output*	Line out 3.5mm jack. 1V p-p, Minimum load impedance: 32 Ohms													
Network Interface	IEEE802.3 and IETF standards: 10/100/1000 Base-Tx Ethernet, TCP, UDP, ICMP, IGMP, SNMP, HTTP, RTP Embedded Linux firewall. Salted passwords, with MD5 encryption; Up to 16 simultaneous unicast video users plus unlimited multicast users													
Time	Embedded real-time clock, NTP client													
Regulatory	EN 55022(1994) ITE - Class A; EN 61000-3-2(1995) - Class A; EN 55024(1998) ITE immunity standard; EN 61000 3-3(1995) voltage fluctuation; CFR47(1995) Part 15 subpart B -Class A Railway Standards: EN 50121-3-2: 2006, EN 50121-4: 2006, EN50155: 2007													
Binary Input/Output	4 opto-isolated inputs; 4 solid state relay outputs													
Dimensions	44 x 226 x 445 mm; 3.4Kg													
Environmental	Operating temp.: 0 to +55°C/+32 to +131°F Storage temp.: -20 to +70°C/-4 to +158°F													
Electrical	Operating voltage: 12V DC @ 3A; Power consumption: 30W (typical) 36W (max)													
Redundancy	Dual redundant switch ports plus third switch port for local NVR													

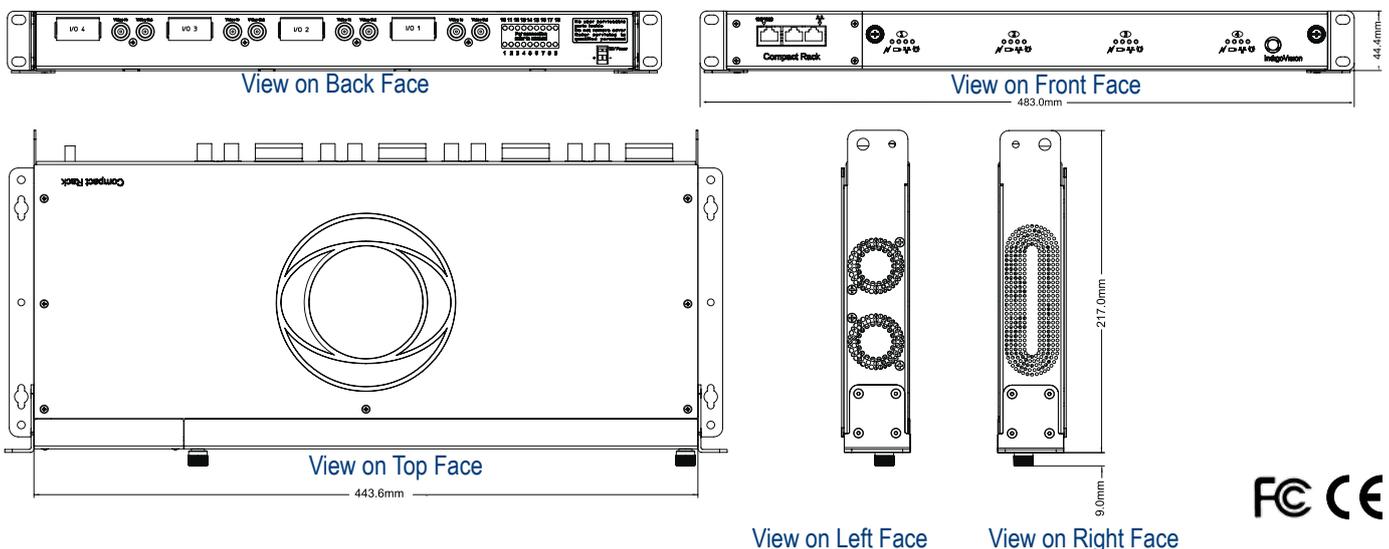
*Audio capability is an order option on all Transmitter/Receiver modules.

Product Codes

4-Channel Rack	8000S	8000E	9000S	9000E	Dual Receiver
4-Channel Rack	N/A	N/A	749904	769904	729947
4-Channel Rack with Audio	741904	761904	749994	769994	722947

The 8000E and 9000E products allow full frame rate video, at full 4SIF resolution.

The 8000S and 9000S products allow the camera to be recorded at full frame rate at SIF resolution, half frame rate at 2SIF and one third frame rate at 4SIF resolution





IndigoVision

Complete IP Video Security Solutions



10-Channel Rack

A family of IP Video Transmitters and Receivers incorporating IndigoVision's class-leading compression technology

IndigoVision's 10-Channel Rack is designed to be used with the company's complete end-to-end IP Video solution and have class-leading MPEG-4 or H.264 compression technology built-in.

The units allow traditional analog CCTV cameras and video monitors to be integrated into an IP network. The 10-Channel Rack can take any combination of Receiver or Transmitter cards. All products have a range of digital I/O for PTZ control and alarm integration.

IndigoVision's IP Video solution allows advanced features such as Activity Controlled Framerate (ACF) and real-time analytics, available as an order option, to be deployed in the Transmitters. These features reduce the bandwidth and NVR storage requirements during periods of scene inactivity and allow the user to deploy advanced analytics to identify events as they occur in real-time.

- Class-leading MPEG-4 or H.264 compression
- Full frame rate, 25/30fps guaranteed
- Mix any combination of Transmitter or Receiver, MPEG-4 or H.264 cards in one rack
- Optional built-in real time analytics
- Optional full duplex audio

Specification

Common Features														
Video Performance	Full frame rate, full color: 25/30fps guaranteed													
Video Compression	9000 Series: H.264 (ISO14496-10) 8000 Series: MPEG-4 (ISO14496-2)													
Audio Compression*	MPEG-4 Advanced Audio Encoding at 16 KHz sample rate & 16 bit resolution													
Video Bit Rate	User-configurable bit rates from 32Kbps up to 6Mbps													
9000 Multi-streaming	<table border="0"> <tr> <td></td> <td>A</td> <td>B</td> <td rowspan="4">You can combine one selection from column A plus one selection from column B: e.g. 2x2SIF streams plus 3xSIF streams e.g. 1x4SIF stream plus 1x4SIF stream</td> </tr> <tr> <td>4SIF</td> <td>1 Stream</td> <td>1 Stream</td> </tr> <tr> <td>2SIF</td> <td>2 Streams</td> <td>2 Streams</td> </tr> <tr> <td>SIF</td> <td>3 Streams</td> <td>3 Streams</td> </tr> </table>		A	B	You can combine one selection from column A plus one selection from column B: e.g. 2x2SIF streams plus 3xSIF streams e.g. 1x4SIF stream plus 1x4SIF stream	4SIF	1 Stream	1 Stream	2SIF	2 Streams	2 Streams	SIF	3 Streams	3 Streams
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8000 Multi-streaming	SIF: 3 streams; 2SIF: 2 streams; 4SIF: 1 stream													
Resolution	4SIF: 704 x 576 pixels 2SIF: 704 x 288 pixels SIF: 352 x 288 pixels (PAL) 4SIF: 704 x 480 pixels 2SIF: 704 x 240 pixels SIF: 352 x 240 pixels (NTSC)													
Video Output	NTSC/PAL composite video, 75 Ohms; 1V p-p, standard BNC connector. Software decode for display to PCs													
Video Input	NTSC/PAL video; 75 Ohms 1V p-p, standard BNC connector													
Data Input/Output	10 Data ports: RS232/RS422/RS485 up to 115.2 Kbps; 1 Console port: RS232 up to 115.2 Kbps													
Audio Input*	Line in 3.5mm jack. Nominal voltage: 1V p-p, 16bit, 16kHz sampling; Mic 30mVp-p. Mic types: support for condensor and dynamic													
Audio Output*	Line out 3.5mm jack. 1V p-p, Minimum load impedance: 32 Ohms													
Network Interface	IEEE802.3 and IETF standards: 10/100/1000 Base-Tx Ethernet, TCP, UDP, ICMP, IGMP, SNMP, HTTP, RTP Embedded Linux firewall. Salted passwords, with MD5 encryption; Up to 16 simultaneous unicast video users plus unlimited multicast users													
Time	Embedded real-time clock, NTP client													
Regulatory	EN 55022(1994) ITE - Class A; EN 61000-3-2(1995) - Class A; EN 55024(1998) ITE immunity standard; EN 61000 3-3(1995) voltage fluctuation; CFR47(1995) Part 15 subpart B -Class A													
Binary Input/Output	10 opto-isolated inputs; 10 solid state relay outputs													
Dimensions	88 x 218 x 483 mm; 3.6Kg													
Environmental	Operating temp.: 0 to +50°C/+32 to +122°F Storage temp.: -20 to +70°C/-4 to +158°F													
Electrical	Operating voltage: 3.3V DC @ 20A; Power consumption: 55W (typical) 66W (max);													
Redundancy	Dual redundant power connectors, Dual redundant switch ports													

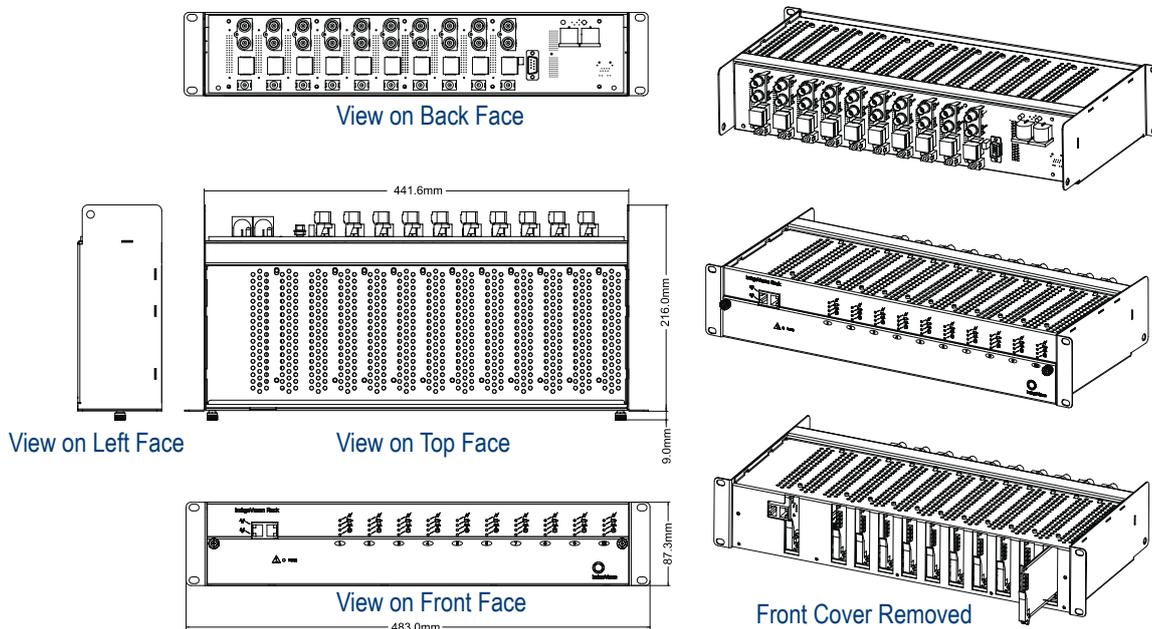
*Audio capability is an order option on all Transmitter/Receiver modules.

Product Codes

10-Channel Rack	8000S	8000E	9000S	9000E	Dual Receiver
10-Channel Rack	N/A	N/A	749992	769992	729917
10-Channel Rack with Audio	741902	761902	749902	769902	729907

The 8000E and 9000E products allow full frame rate video, at full 4SIF resolution.

The 8000S and 9000S products allow the camera to be recorded at full frame rate at SIF resolution, half frame rate at 2SIF and one third frame rate at 4SIF resolution



ID: IV-10TXRX 11.1
AUG 11



IndigoVision

Complete IP Video Security Solutions



Standalone Transmitters & Receivers

A family of IP Video Transmitters and Receivers incorporating IndigoVision's class-leading compression technology

IndigoVision's range of Standalone Transmitter and Receiver products are designed to be used with the company's complete end-to-end IP Video solution and have class-leading H.264 compression technology built-in.

The units allow traditional analog CCTV cameras and video monitors to be integrated into an IP network. The standalone unit is available as either a Transmitter only or as a Transmitter/Receiver.

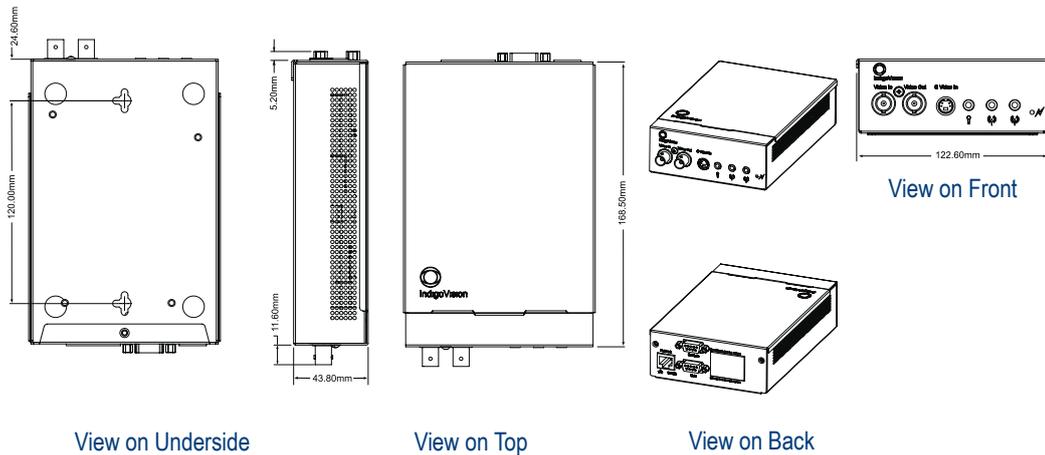
IndigoVision's IP Video solution allows advanced features such as Activity Controlled Framerate (ACF) and real-time analytics, available as an order option, to be deployed in the Transmitters. These features reduce the bandwidth and NVR storage requirements during periods of scene inactivity and allow the user to deploy advanced analytics to identify events as they occur in real-time.

- Class-leading H.264 compression
- Full frame rate 25/30fps guaranteed
- Power-over-Ethernet for lower installation costs
- Optional full duplex audio
- Optional built-in real time analytics
- Extended Temperature Option

Specification

Video Performance	Full frame rate, full color: 25/30fps guaranteed		
Video Compression	9000 Series: H.264 (ISO14496-10) 8000 Series: MPEG-4 (ISO14496-2)		
Audio Compression*	MPEG-4 Advanced Audio Encoding at 16 Khz sample rate & 16 bit resolution		
Video Bit Rate	User-configurable bit rates from 32Kbps up to 6Mbps		
Resolution	4SIF: 704 x 576 pixels 2SIF: 704 x 288 pixels SIF: 352 x 288 pixels (PAL) 4SIF: 704 x 480 pixels 2SIF: 704 x 240 pixels SIF: 352 x 240 pixels (NTSC)		
9000 Multi-streaming	A	B	You can combine one selection from column A plus one selection from column B: e.g. 2x2SIF streams plus 3xSIF streams e.g. 1x4SIF stream plus 1x4SIF stream
	4SIF 1 Stream	1 Stream	
	2SIF 2 Streams	2 Streams	
	SIF 3 Streams	3 Streams	
8000 Multi-streaming	SIF: 3 streams; 2SIF: 2 streams; 4SIF: 1 stream		
Video Output	NTSC/PAL composite video, 75 Ohms; 1V p-p, standard BNC connector. Software decode for display to PCs		
Video Input	NTSC/PAL video; 75 Ohms 1V p-p, standard BNC connector; S-Video		
Data Input/Output	1 Data port: RS232/RS422/RS485 up to 115.2 Kbps; 1 Data/Console port: RS232 up to 115.2 Kbps		
Audio Input*	Line in 3.5mm jack. Nominal voltage: 1V p-p, 16bit, 16kHz sampling; Mic 30mVp-p. Mic types: support for condenser and dynamic		
Audio Output*	Line out 3.5mm jack. 1V p-p, Minimum load impedance: 32 Ohms		
Network Interface	IEEE802.3 and IETF standards: 10/100 Base-T Ethernet, TCP, UDP, ICMP, IGMP, SNMP, HTTP, RTP Embedded Linux firewall. Salted passwords, with MD5 encryption; Up to 16 simultaneous unicast video users plus unlimited multicast users		
Time	Embedded real-time clock, NTP client		
Regulatory	EN 55022(1994) ITE - Class A; EN 61000-3-2(1995) - Class A; EN 55024(1998) ITE immunity standard; EN 61000 3-3(1995) voltage fluctuation; CFR47(1995) Part 15 subpart B -Class A		
Binary Input/Output	4 opto-isolated inputs; 2 solid state relay outputs		
Dimensions	167 x 110 x 45 mm, 0.6Kg (excluding power supply)		
Operating Voltage	Power over Ethernet (802.3af Class 0); 14/35V DC, 24V AC		
	Standard	Extended Temp A	Extended Temp B
Operating Temperature	0 to +50°C/+32 to +122°F	0 to +65°C/+32 to +149°F	-30 to +65°C/-22 to +149°F
Storage Temperature	-20 to +70°C/-4 to +158°F	-20 to +70°C/-4 to +158°F	-30 to +70°C/-4 to +158°F
Power Consumption	7W max	8W max	8W (unit) + 30W (heater) max

*Audio capability is an order option on all Transmitter/Receiver modules.



Product Codes

Standalone Transmitter/Receiver	9000 Transmitter only		9000 Transmitter / Dual Receiver	
	9000S	9000E	S	E
Standard	749116	769116	N/A	N/A
Extended Temp. 0 to +65°C	749128	769128	N/A	N/A
Extended Temp. -30 to +65°C	749130	769130	N/A	N/A
Standard with Audio	N/A	N/A	749103	769103
Extended Temp. with Audio 0 to +65°C	N/A	N/A	749126	769126
Extended Temp. with Audio -30 to +65°C	N/A	N/A	749129	769129

The 9000E product allows full frame rate video, at full 4SIF resolution. The 9000S product allows the camera to be recorded at full frame rate at SIF resolution, half frame rate at 2SIF and one third frame rate at 4SIF resolution.



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IndigoVision

Complete IP Video Security Solutions



Surveillance Keyboard

Who needs a mouse?

IndigoVision's Surveillance Keyboard is used to access Control Center's Virtual Matrix and IP Video Wall. The Control Center Virtual Matrix allows the Surveillance Keyboard to control IndigoVision and most 3rd party PTZ cameras including Pelco, Panasonic and Philips-Bosch.

- Desktop keyboard with 3-axis joystick (pan/tilt/zoom)
- Multi-function keys and menu structure
- Full variable control of speed domes
- Backlit LCD Graphic Display
- Automatic Dome Protocol Translation (through Control Center software)
- Full control of Control Center Virtual Matrix

Specifications

Product Code	11066
Joystick	Proportional 3 axis
Numeric Keypad	12 Keys
Multi-function Keypad	10 Keys
LCD Graphic Display	128x128 Dots Blue Screen
LCD Backlit	Yes
Keyboard Power Supply	12V DC; Power supply included
Power Consumption	15W
Ambient Operating Temperature	+5°C / +40°C
Dimensions	365mm x 113mm x 160mm
Weight	1060g
RS232 connections	1 Serial Line (COM) Female DB9 Connector
Approval/certification	EN 55022:1998 + A1:2000 + A2:2003 + EC:2005 Class B; EN 50130-4:1995 + A1:1998 + A2:2003 EN 60950-1:2001; Directive 2002/95/CE (ROHS)





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Alarm Panel

The simplest way to connect 3rd party systems to IndigoVision.

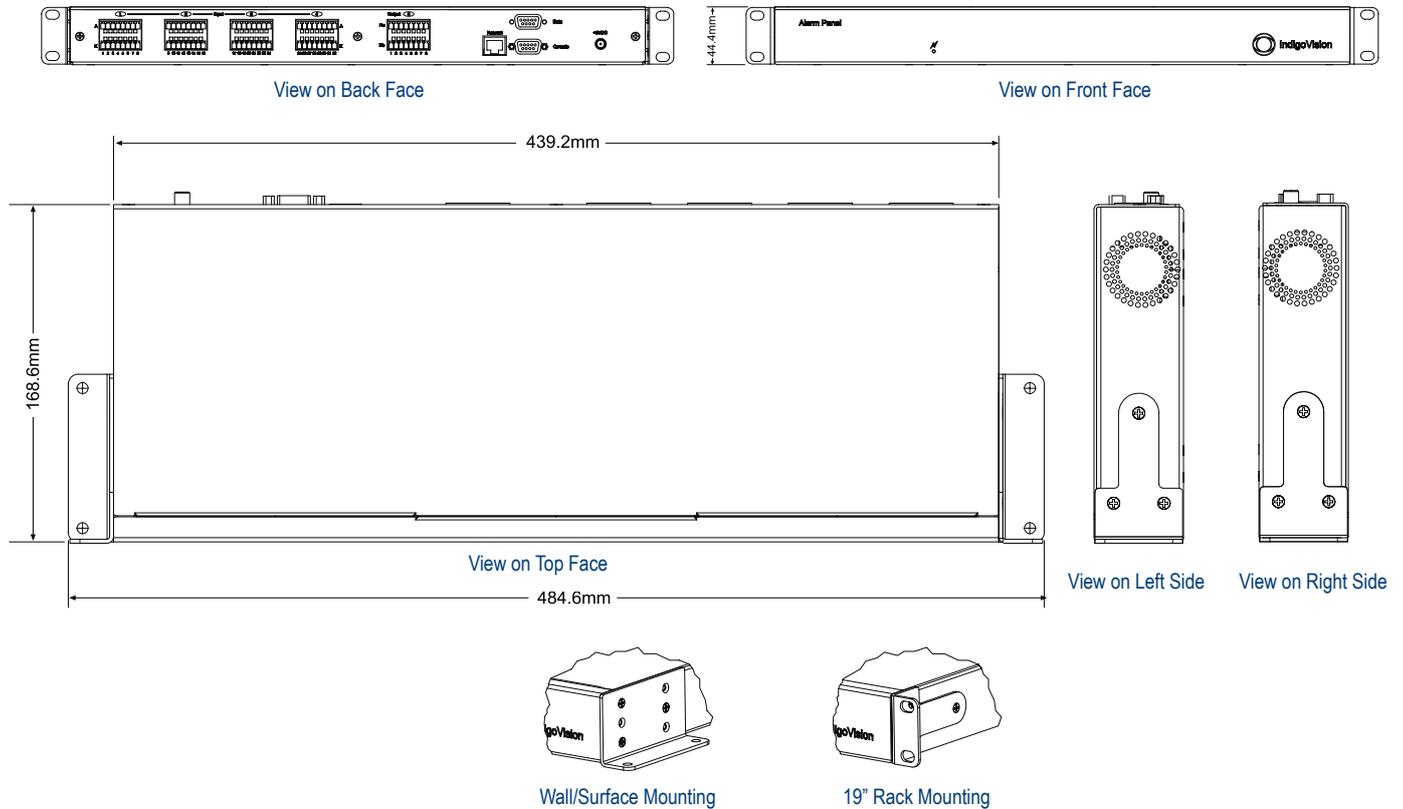
The IndigoVision Alarm Panel connects to a 10/100 Ethernet LAN and provides 32 binary inputs and 8 relay outputs. The Alarm Panel is 19" rack mountable and two variants are available:

- Alarm Panel with Opto-Isolated Inputs for detecting standard alarm source events.
- Alarm Panel with Supervised Tamper-Detect Inputs for detecting open or close circuit events as well as alarm source events.

Positive and/or negative edge triggered inputs can generate events on the IP network which can be used by Control Center to record video, display video from specific cameras, move cameras to preset PTZ positions, activate binary outputs etc. Outputs can be activated remotely over the IP network.

Specification

Dimensions



Specifications	
Electrical	Operating voltage: 5V DC @ 1.2A; Power consumption: 5W (typical) 6W (max)
Binary Input/Output	32 opto-isolated or supervised tamper-detect inputs; 8 solid state relay outputs
Ratings	Normally open relay outputs: Maximum ON resistance 40 Ohms Maximum carry current 100mA; Maximum voltage 50Vpk
Environmental	Operating temp: 0 to +50°C/+32 to +122°F
Dimensions	44.4mm x 439.2mm x 167.4mm (1U)
Weight	4.4kg
Network Interface	Ethernet IEEE802.3 and IETF standards: 10/100 Base-T Ethernet, TCP, UDP, ICMP, IGMP, SNMP, HTTP; Embedded Linux firewall
Data Input/Output	1 Data port: RS232/RS422/RS485 up to 115.2 Kbps; 1 Data/Console port: RS232 up to 115.2 Kbps
Time	Embedded real-time clock, NTP client
Regulatory	EN55022 ITE Emission standard Class A; EN61000-3-2 Mains Harmonics Class A; EN61000-3-3 Voltage Fluctuation EN55024 ITE Immunity standard; CFR47: 2002 Part 15 Sub Part B (US federal code of regulations)



IndigoVision

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Control Center

Freedom to choose any camera

Control Center is the Windows client for IndigoVision's Security Management System. The software has an unlimited license and the option to locate operators anywhere on the network. The user friendly interface enables quick and efficient management of all your video and events from one location.

- Intuitive GUI
- Lightning quick evidence review

Control Center 4 is ONVIF conformant allowing live viewing and playback of a large selection of cameras. Along with integration with popular manufacturers of access control and other security systems, this gives you what is probably the most open system on the market.

- View any camera, anywhere, anytime
- Unified control for your entire system



Specification

Feature	Supported on IndigoVision Devices	Supported on ONVIF Devices
Live Viewing	100 video streams (25 per screen)	100 video streams (25 per screen)
PC Monitors	4	4
Video Compression Formats	MPEG-4 / H.264	H.264 / MJPEG
Video Resolutions	SIF / 2SIF / 4SIF / 720p	up to 1080p
Audio	Receive / Transmit	Receive
Audio Compression Formats	AAC	G.711
Network Connection Types	TCP / UDP Unicast (Tunnelled) / UDP Multicast	TCP (Tunnelled) / UDP Unicast / UDP Multicast
Snapshots	BMP / JPEG	BMP / JPEG
PTZ Control	✓	✓ (excluding presets)
Digital Zoom	✓	✓
Camera Views	✓	✓
Privacy Zones	✓	✓
Analog Monitors (Receivers)	✓	X
Video Wall	✓	✓
Playback	25 streams	25 streams
Synchronous Playback	✓	✓
Reverse Playback	✓	✓
Frame step	✓	✓
Bookmarking	✓	X
Search (Alarms and Bookmarks)	✓	X
Motion Search	✓	X
Thumbnails	Time / Alarm / Bookmark / Motion	Time
Incident Export	Incident Player / 3rd Party Player (.mp4)	Incident Player / 3rd Party Player (.mp4)
Camera Sequences	✓	✓
Salvos	✓	✓
Guard Tours	✓	✓
Matrix Numbering	1 - 9999	1 - 9999
Keyboard Support	IndigoVision / Pelco / American Dynamics / Panasonic	IndigoVision / Pelco / American Dynamics / Panasonic
Event Inputs	Binary / 3rd Party / Analytics / Network and Video Loss	X
Zones	Group multiple inputs into a single alarm	Not Applicable
Actions	Record / Email / Move to Preset / Relay Output	Record / Email
Alarm Video	Live and Looped Replay / Pre-alarm video	Live and Looped Replay / Pre-alarm video
Procedure Documents	HTML / Text / URL	HTML / Text / URL
Time Schedules	✓	✓
Alarms on Maps	✓	Not Applicable
Alarm Reports	✓	Not Applicable
Feature		
User Authentication	Windows authentication / Basic password	
User Groups	✓	
Access Permissions	Object and function based permissions	
Architecture	Fully distributed, no central server	
Licensing	Unlimited users	
Device Discovery	✓	
Maps	Multi-layered maps (BMP)	
Timezones	✓	
Device Status Summary	✓	
Audit Log	✓	
Multiple Languages	12+ languages including; French, German, Italian, Spanish	
Open Standards	ONVIF Conformant	
Certification	BS8495:2007	
Operating Systems		
Supported (Recommended)	Windows-XP [®] Professional 32-bit, Windows 7 [®] 64-bit	
Supported	Windows 7 [®] 32-bit, Windows Vista [®] 32-bit	
Not Supported	Windows Vista [®] 64-bit, Windows XP [®] Professional 64-bit	



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IndigoVision IP Video Wall

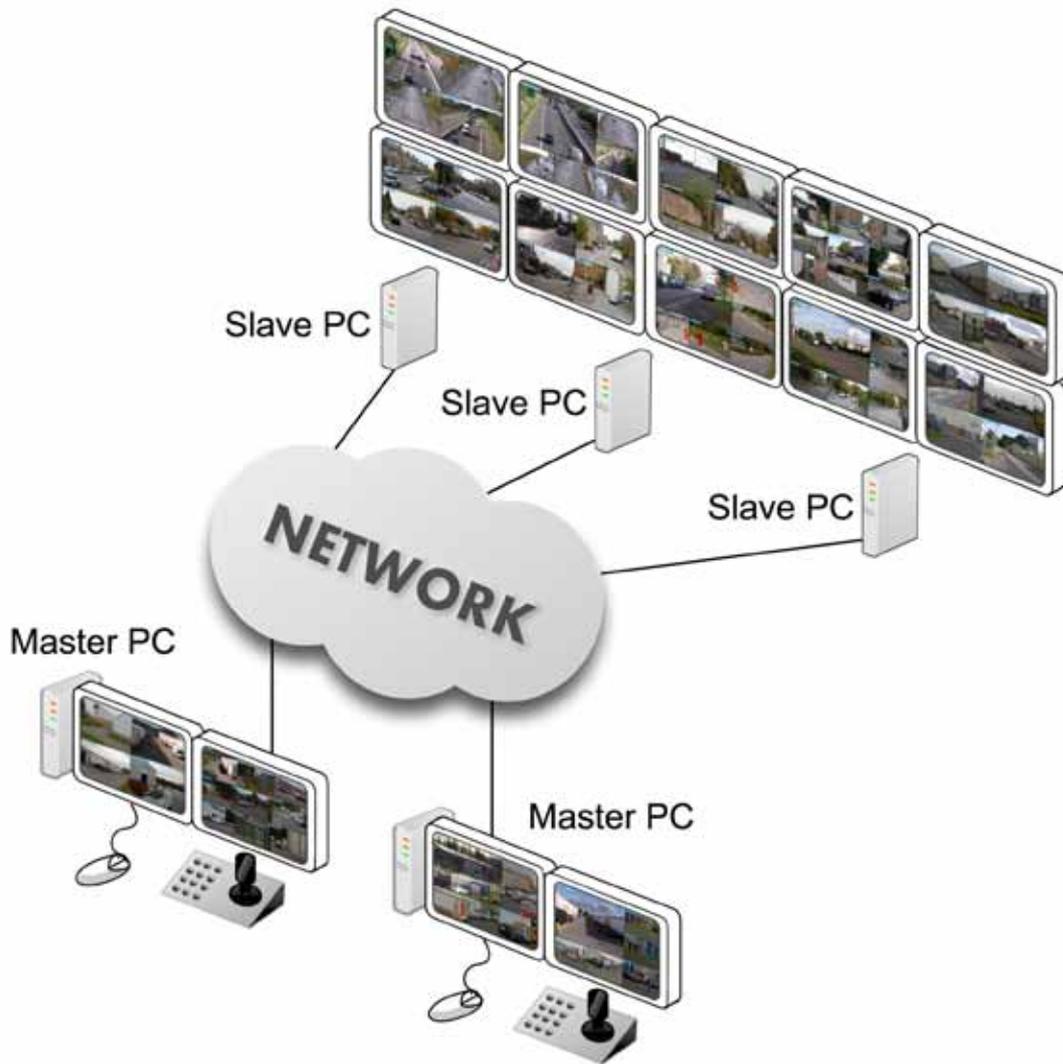
Build your own control rooms. Cost effectively and scalably.

Using IndigoVision's IP Video Wall software, a video wall can be constructed using slave workstations, each of which manages up to 4 monitors. The video wall is controlled over an IP network by an unlimited number of master workstations. Large video walls are constructed using as many Slaves as necessary.

The video wall is managed from Master Control Center workstations through a standard CCTV keyboard. Monitors within the video wall can be used to display a variety of information; Video, Guard Tours, Salvos, Site Maps, Alarm Status.

- Construct video walls using any PC monitors e.g. CRT, Plasma, LCD, HD TV
- Unlimited scalability
- Supports standard and High Definition widescreen video
- Controlled using standard CCTV keyboards
- Display Video, Site Maps and Alarm Status
- Dynamically change the video layout of a monitor

Specification



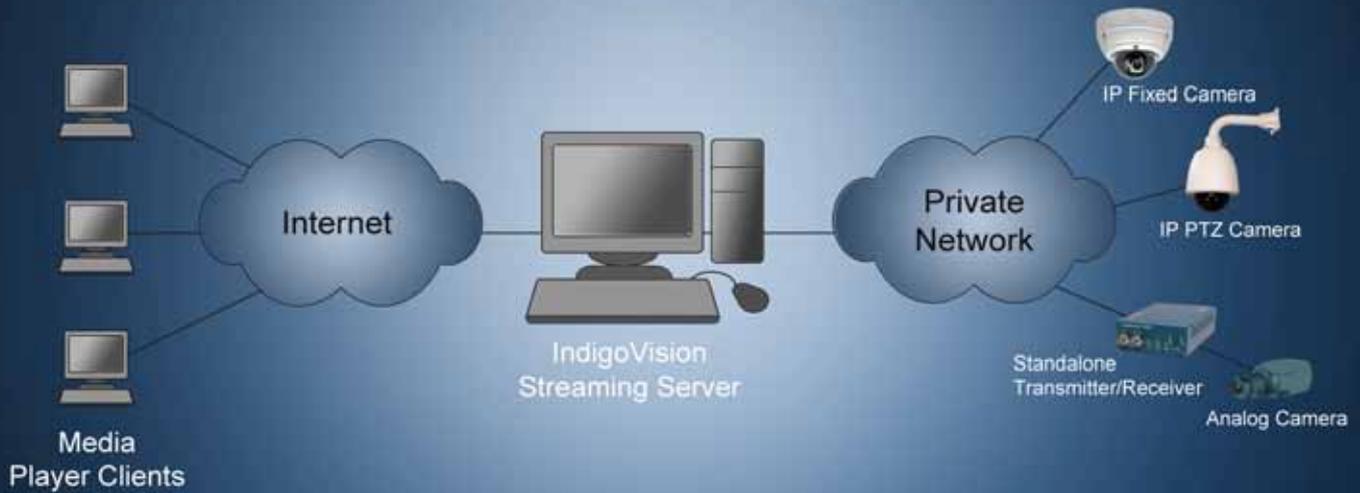
General Specifications	Supported CCTV Keyboards	CCTV Keyboard Actions
Licensed by USB dongle on each 'slave' PC	IndigoVision CCTV Keyboard	Select camera into pane
Unlimited 'master' PCs	Pelco KBD300A	Stop video on pane
Max slaves: 98	American Dynamics ADCC1100	Pan/Tilt/Zoom/Focus/Iris/Presets control
Max monitors per slave: 4	American Dynamics AD2088	Sequence control (start/stop/pause/next/previous)
Max video panes per monitor: 25	Panasonic WV-CU650	Salvo control (start/stop)
Max Video Wall: 9800 video panes		Guard Tour control (start/stop)
Supported by Control Center v3.18 onwards		Change monitor layout

Operating System	Supported
Windows 7® 32-bit	Domain only
Windows Vista® 32-bit	Domain or workgroup
Windows XP® Professional 32-bit	Domain or workgroup
Windows 7® 64-bit	Domain only



IndigoVision

Complete IP Video Security Solutions



Internet Streaming Server

Webcast your cameras to the outside world

The IndigoVision Internet Streaming Server provides a webcasting solution to customers who wish to make their IndigoVision cameras viewable on the Internet. An example of a typical application would be the webcasting of traffic monitoring cameras.

The IndigoVision Streaming Server is a Microsoft Windows Service that can be installed on any suitable Windows PC. Client PCs request video streams through standard media players. The IndigoVision Streaming Server can transmit each "internal" camera to an unlimited number of Internet clients.

- Microsoft Windows Service
- Compatible with major media players
- Transmit to unlimited Internet clients
- Supports MPEG-4 and H.264

Specifications

Video	MPEG-4 and H.264
Operating Systems	Windows 2003 Server
Media Clients Supported	Apple Quicktime, RealNetworks Realplayer
Firewalls	No client firewall configuration required. Video is streamed through standard ports
Buffer Control	Automatic. The Streaming Server dynamically controls buffering to compensate for packet loss or varying available Internet bandwidth
Licensing	Licensing based on number of cameras being simultaneously viewed. The number of clients viewing those cameras is not restricted
Transmitter Firmware	Compatible with 8000 firmware v2.13 onwards, 9000 firmware v3.4 onwards and 11000* firmware v4.0 onwards
Server Hardware	Requires a 2.8GHz dual core processor to support 2000 simultaneous clients viewing one 140kbps stream. This is a total data throughput of about 250Mbps. Requires 256MB RAM for every 50Mbps of data throughput being served.

*Note: HD 720p streaming only supported in QuickTime versions up to, and including, v7.5.5



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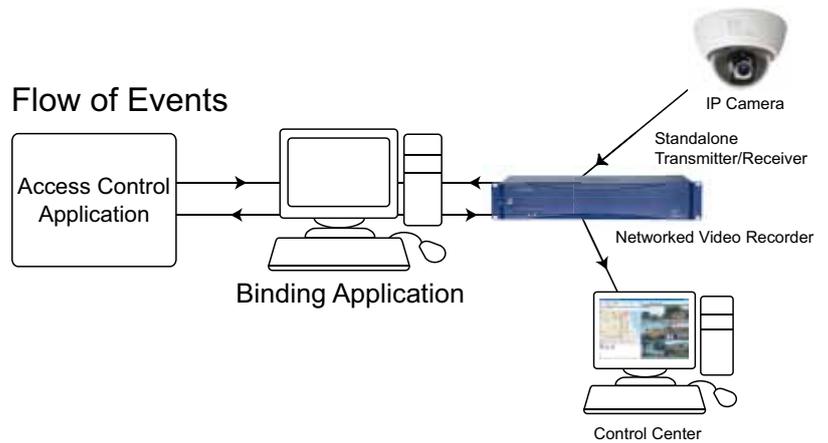
Complete IP Video Security Solutions

Software Development Kit

The IndigoVision Software Development Kit allows software developers to integrate 3rd party applications with the IndigoVision IP Video and Alarm Management System. The kit consists of five components specified below. All components are available to authorized partners, free of charge, on the IndigoVision Product CD, product code: 317802.

IndigoVision Binding Kit

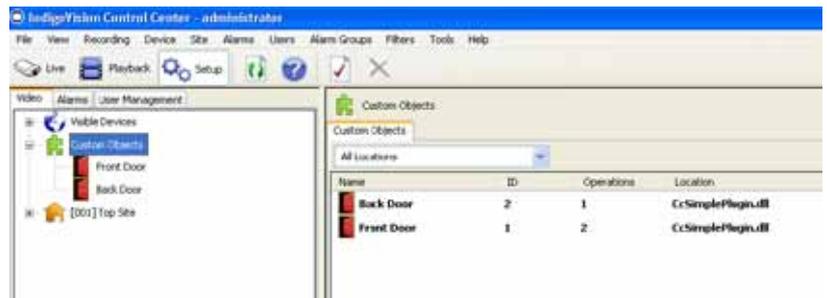
The IndigoVision Binding Kit enables software to be developed that integrates external systems such as alarm management, EPOS and access control systems with the IndigoVision IP Video System. The Kit allows developers to write applications using standard languages such as Visual Basic or VBScript. Both a 'C' DLL and a COM interface are provided. Binding Kit applications can generate external alarm events within an IndigoVision system, or receive alarm status events from IndigoVision NVRs. Alarm status events are generated by NVRs when new alarms occur and when existing alarms are assigned, acknowledged or deleted.



Custom Objects

Control Center supports a plugin architecture which allows third party developers to integrate objects into the Control Center device hierarchy and map displays. For example, an integration between Control Center and an access control system could create objects representing doors. The door objects could be controlled through the Control Center user interface via custom menus and mouse click events. In addition, the access control system could refresh the state of the door object by changing its icon automatically.

The Custom Object SDK supports customised icons, menus and actions. Developers create plugin DLLs which comply with the IndigoVision interface. Control Center administrators then create instances of the custom objects within the Control Center device hierarchy and place their icons on maps.





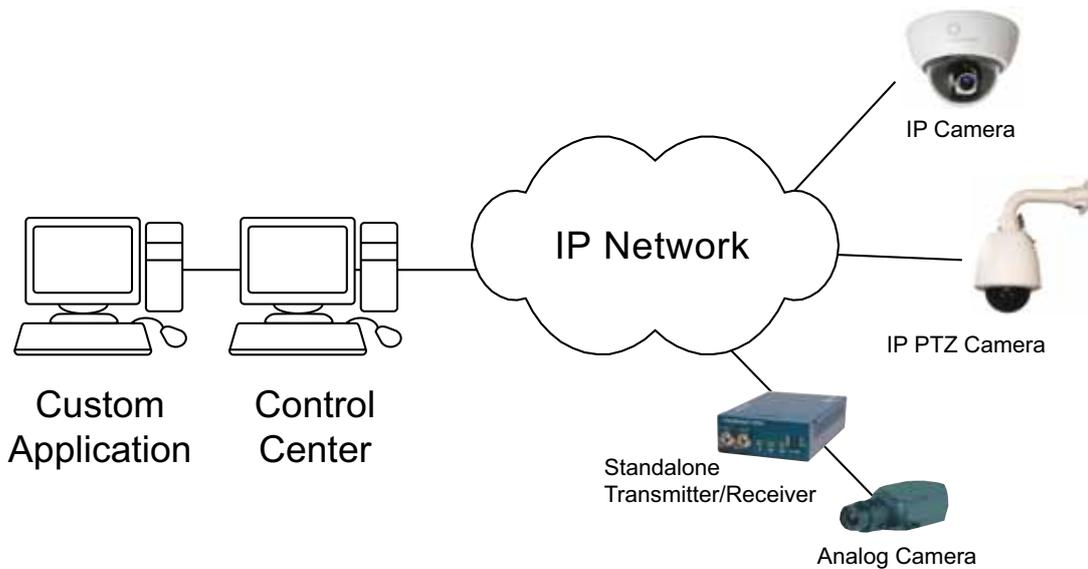
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Software Development Kit

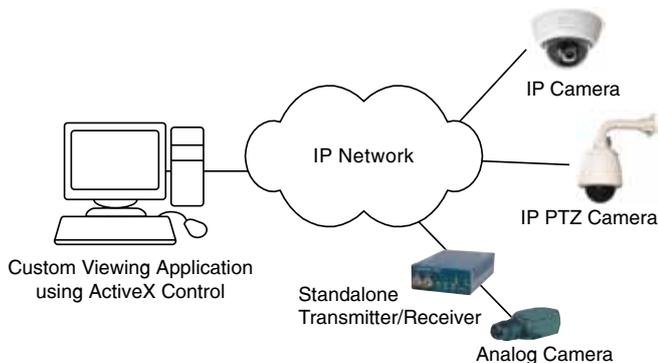
Control Center Automation Interface

The Control Center Automation Interface is a COM interface that enables external scripts and programs to carry out a number of operations on the Control Center application. These include starting and stopping live video, playing back and exporting recordings and moving PTZ cameras.



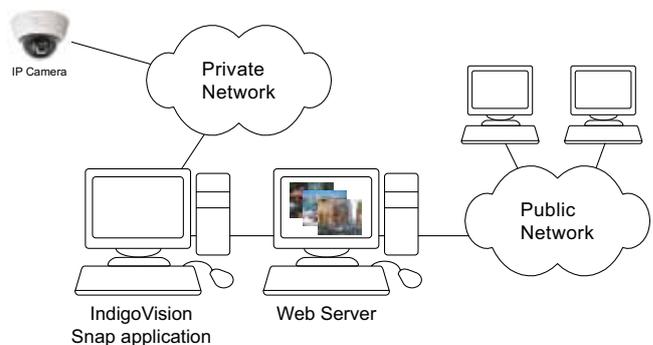
IndigoVision Viewer ActiveX Control

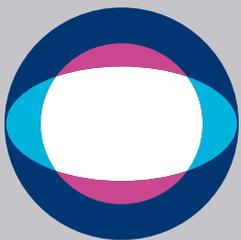
The IndigoVision Viewer ActiveX Control is a Microsoft Win32 (x86) component that can display live video and audio from an IndigoVision 8000, 9000 or 11000 transmitter. The control may be embedded in a variety of ActiveX containers such as Internet Explorer (in an HTML web page), .NET Windows Forms, Visual Basic or a number of other development tools.



IndigoVision Snap

The IndigoVision Snap utility allows you to grab frames from a specified IndigoVision 8000, 9000 or 11000 transmitter at regular intervals and save them to a destination directory in JPEG format. To take snapshots from multiple cameras, start multiple instances of IndigoVision Snap.





IndigoVision

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