

# Camclosure® IS Series Indoor Mini Dome

## IS90 SERIES SURFACE MOUNT/IN-CEILING, WDR, DAY/NIGHT, HIGH RESOLUTION

### Product Features

- Fully-Integrated Indoor Enclosure with Camera and Lens
- Single Model for Surface Mount and Recessed Ceiling Applications with 4S Adapter Plate
- 4 Camera Options:
  - Day/Night Wide Dynamic Range (WDR): Pixel-Based Imager for Accurate Color Representation, Progressive Scan
  - Day/Night High Resolution: 540 TVL
  - Wide Dynamic Range (WDR): Pixel-Based Imager for Accurate Color Representation, Progressive Scan
  - High Resolution Color: 540 TVL
- Varifocal Lens Options: 3 mm to 9.5 mm, 9 mm to 22 mm
- Fixed Lens Options: 3 mm, 3.6 mm, 6 mm, 8 mm, 12 mm
- Includes Both Composite and Unshielded Twisted Pair (UTP) Outputs
- All Models Include 1 Smoked Bubble, 1 Clear Bubble, and 1 Liner
- Shipped Completely Assembled, Easy to Install
- 12 VDC or 24 VAC Operation, Autosensing
- Manual, 3-Axis (Pan/Tilt/Rotation) Positioning Allows Adjustment for Optimum Camera Rotation and Placement
- Housing Available in White or Black
- Service Connector for Video Output



IS90 SERIES DOME  
SHOWN WITH OPTIONAL  
PENDANT WALL MOUNT (IS90-PW)

NOTE: REMOVE THE SURFACE  
MOUNT RING FOR RECESSED  
INSTALLATIONS.



IS90 SERIES DOME  
SHOWN WITH  
SURFACE MOUNT RING

### Camera Modules

The **IS90 Series Camclosure® Integrated Camera System** offers a large selection of camera and lens options. Available camera modules include the following:

- **Day/night wide dynamic range (WDR) and wide dynamic range:** Pelco's WDR uses a pixel-based imager that adjusts for lighting by pixel. Traditional CCD cameras adjust the entire image for lighting conditions that appear in a small portion of the image or that are not extreme. Different lighting problems occur at night. Car headlights and parking lot lights are good examples of problematic video images. Use Pelco's Day/Night WDR where you need the camera to adjust from extreme lighting to low light conditions.
- **Day/night high resolution (540 TVL) color camera** with auto iris, varifocal lens; Application examples include environments that require monochrome images at night and color images during the day.
- **High (540 TVL) resolution color camera** with auto iris, varifocal lens or fixed iris lens; application examples include all general-purpose environments.

### Enclosure Modules

The **IS90 Series Camclosure Integrated Camera System** integrates a camera and lens package into a small, versatile indoor enclosure that can be mounted directly to, or recessed into, a ceiling or wall. The **IS90 Series** features a three-axis camera and lens positioning system that is capable of 360 degrees of tilt, and 360 degrees of rotation.

The **IS90 Series** is shipped completely assembled, making installation fast and easy. To surface-mount the unit, remove it from the box, attach it to the mounting surface, and connect video and power. For recessed installations, simply remove the surface mount ring (no tools required) and then install the unit inside a ceiling or wall. A 4S adapter plate is supplied with the unit for electrical box installations.



by **Schneider Electric**

International Standards  
Organization Registered Firm:  
ISO 9001 Quality System



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# TECHNICAL SPECIFICATIONS

## GENERAL

Pan/Tilt Adjustment	Manual
Pan	360°
Tilt	140° (20° to 160° range)
Rotation	360°
Construction	
Back Box and	ABS plastic
Surface Mount Ring	Polycarbonate
Bubble	
Finish	White or black
Light Attenuation	
Smoked	f/1.5 light loss
Clear	Zero light loss
Environment	Indoor
Operating Temperature	32° to 120°F (0° to 49°C)
Unit Weight	0.52 lb (0.24 kg)
Shipping Weight	2 lb (0.91 kg)

## ELECTRICAL

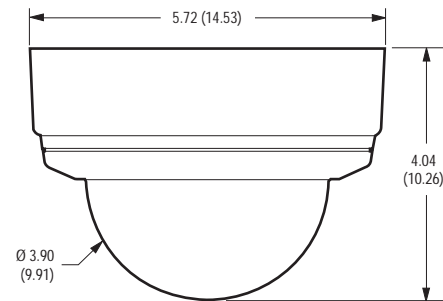
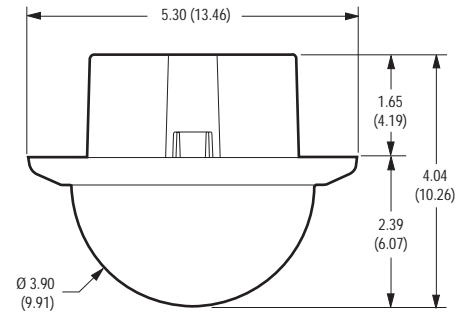
Input Voltage*	12 VDC or 24 VAC (±10%), autosensing
Synchronization	Internal or AC line lock
Power Consumption	<3 W (DW/CW models) <4 W (DN/CH/C models)

## VIDEO

Signal System	NTSC or PAL
Video Output	
Composite	1 Vp-p, 75 ohms
UTP	1 Vp-p, 100 ohms
Video Connectors	1 composite BNC and 1 UTP
Service Connector	3-conductor, 2.5 mm connector for video output to optional IS-SC cable

## CERTIFICATIONS/PATENTS

- CE, Class B
- FCC, Class B
- UL/cUL Listed
- C-Tick
- U.S. Patents D497,927 S; 6,715,939 B2; 6,805,498 B2



NOTE: VALUES IN PARENTHESES ARE CENTIMETERS;  
ALL OTHERS ARE INCHES.

\*24 VAC power is recommended when installing any Camclosure Integrated Camera System under fluorescent lighting conditions.

# TECHNICAL SPECIFICATIONS

## CAMERA SPECIFICATIONS

	Day/Night Wide Dynamic Range Varifocal, Auto Iris (DW Series)	Day/Night High Resolution Varifocal, Auto Iris (DN Series)	Wide Dynamic Range Varifocal, Auto Iris (CW Series)	High Resolution Varifocal, Auto Iris (CH Series)
Imaging Device	1/3-inch Pixel Based Imager	1/3-inch Interline Color CCD	1/3-inch Pixel Based Imager	1/3-inch Interline Color CCD
Picture Elements	720 (H) x 540 (V)	NTSC: 768 (H) x 494 (V) PAL: 752 (H) x 582 (V)	720 (H) x 540 (V)	NTSC: 768 (H) x 494 (V) PAL: 752 (H) x 582 (V)
Dynamic Range (DW/CW only)	102 dB typical 120 dB maximum	—	102 dB typical 120 dB maximum	—
Scanning System	2:1 Interlace/ Progressive (DIP switch)	2:1 Interlace	2:1 Interlace/ Progressive (DIP Switch)	2:1 Interlace
Horizontal Resolution	NTSC: 504 TV lines PAL: 504 TV lines	NTSC: 540 TV lines PAL: 540 TV lines	NTSC: 504 TV lines PAL: 504 TV lines	NTSC: 540 TV lines PAL: 540 TV lines
Signal-to-Noise Ratio	>53 dB	>50 dB	>53 dB	>50 dB
Minimum Illumination	Color (day): 0.8 lux SENS 8X: 0.2 lux B-W (night): 0.08 lux SENS 8X: 0.02 lux (f/1.0, 40 IRE, AGC on, 75% scene reflectance, 3.0 ~ 9.5 mm lens)	Color (day): 0.15 lux B-W (night): 0.015 lux (f/1.0, 40 IRE, AGC on, 75% scene reflectance, 3.0 ~ 9.5 mm lens)	Color (day): 0.8 lux SENS 8X: 0.2 lux (f/1.0, 40 IRE, AGC on, 75% scene reflectance, 3.0 ~ 9.5 mm lens)	0.3 lux (f/1.0, 40 IRE, AGC on, 75% scene reflectance, 3.0 ~ 9.5 mm lens)
Day/Night Operation				
Day	Infrared (IR) cut filter	Infrared (IR) cut filter and optical low pass filter	—	—
Night	No filter	Optical low pass filter	—	—
Filter Switch Threshold	Dusk 4 lux Dark 1 lux	0.15 lux	—	—
Gain Control	Auto (36 dB maximum)	Auto/Manual (DIP switch)	Auto (36 dB maximum)	Auto/Manual (DIP switch)
Exposure	Auto (1/15 ~ 1/22,000)	Auto (1/60 ~ 1/100,000)	Auto (1/15 ~ 1/22,000)	Auto (1/60 ~ 1/100,000)
White Balance	Auto or manual (DIP switch), 2800°K to 7500°K	Auto or manual (DIP switch), 2500°K to 9500°K	Auto or manual (DIP switch), 2800°K to 7500°K	Auto or manual (DIP switch), 2500°K to 9500°K
Backlight Compensation	Auto	ON/OFF (DIP switch)	Auto	ON/OFF (DIP switch)

## LENS SPECIFICATIONS

Series	Varifocal With Auto Iris				Fixed Focal Without Iris				
	DW/CW Series		DN/CH Series		CH Series				
Focal Length	3.0 mm ~ 9.5 mm	9.0 mm ~ 22.0 mm	3.0 mm ~ 9.5 mm	9.0 mm ~ 22.0 mm	3 mm	3.6 mm	6.0 mm	8.0 mm	12.0 mm
Format Size	1/3-inch	1/3-inch	1/3-inch	1/3-inch	1/3-inch	1/3-inch	1/3-inch	1/3-inch	1/3-inch
F-Number (f)	1.0 to 1.7	1.5 to 3.0	1.0 to 1.7	1.5 to 3.0	2.0	2.0	2.0	2.0	2.2
Operation									
Iris	Auto	Auto	Auto	Auto	N/A	N/A	N/A	N/A	N/A
Focus	Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual
Zoom	Manual	Manual	Manual	Manual	N/A	N/A	N/A	N/A	N/A
Angle of View*									
Horizontal	100.4° to 31.6°	32.4° to 13.6°	95.0° to 30.2°	30.6° to 13.0°	90.2°	72.9°	40.1°	31.5°	19.7°
Diagonal	131.6° to 39.6°	41.1° to 17.2°	123.6° to 37.6°	39.2° to 16.4°	120.0°	92.0°	53.0°	40.0°	28.0°
Vertical	72.8° to 23.8°	23.8° to 10.2°	69.0° to 22.6°	22.6° to 9.8°	65.4°	54.1°	30.4°	23.7°	15.0°

\*Focal length specifications presume a 10% horizontal and 4% vertical monitor overscan.

# SYSTEM MODELS AND ACCESSORIES

## MODEL NUMBERS

### Dome Only

ICS-090HNU IS90 Series indoor dome (no camera/lens), white housing; includes 1 smoked bubble, 1 clear bubble, and 1 liner.  
ICS-090BHNU IS90 Series indoor dome (no camera/lens), black housing; includes 1 smoked bubble, 1 clear bubble, and 1 liner.

## System Numbers

Camera	Lens	White Finish		Black Finish	
		NTSC	PAL	NTSC	PAL
Day/Night WDR	3.0 ~ 9.5 mm with Auto Iris	IS90-DWV9		IS90B-DWV9	
	9.0 ~ 22.0 mm with Auto Iris	IS90-DWV22		IS90B-DWV22	
Day/Night	3.0 ~ 9.5 mm with Auto Iris	IS90-DNV9	IS90-DNV9X	IS90B-DNV9	IS90B-DNV9X
	9.0 ~ 22.0 mm with Auto Iris	IS90-DNV22	IS90-DNV22X	IS90B-DNV22	IS90B-DNV22X
WDR	3.0 ~ 9.5 mm with Auto Iris	IS90-CWV9		IS90B-CWV9	
	9.0 ~ 22.0 mm with Auto Iris	IS90-CWV22		IS90B-CWV22	
Color	3.0 mm	IS90-CH3	IS90-CH3X	IS90B-CH3	IS90B-CH3X
	3.6 mm	IS90-CH3.6	IS90-CH3.6X	IS90B-CH3.6	IS90B-CH3.6X
	6.0 mm	IS90-CH6	IS90-CH6X	IS90B-CH6	IS90B-CH6X
	8.0 mm	IS90-CH8	IS90-CH8X	IS90B-CH8	IS90B-CH8X
	12.0 mm	IS90-CH12	IS90-CH12X	IS90B-CH12	IS90B-CH12X
	3.0 ~ 9.5 mm with Auto Iris	IS90-CHV9	IS90-CHV9X	IS90B-CHV9	IS90B-CHV9X
	9.0 ~ 22.0 mm with Auto Iris	IS90-CHV22	IS90-CHV22X	IS90B-CHV22	IS90B-CHV22X

## RECOMMENDED POWER SUPPLIES

TF2000 Power supply for one 24 VAC camera, 20 VA  
MCS Series Multiple 24 VAC camera power supply, indoor

## OPTIONAL ACCESSORIES

IS-SC 4-foot service/monitor cable; compatible with any standard monitor BNC connector  
IS90-P White pendant mount adapter  
IS90B-P Black pendant mount adapter  
IS90-PW White pendant wall mount  
IS90B-PW Black pendant wall mount

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