Camclosure® IS Series Rugged Wedge Enclosure
IS210 SERIES WALL/CEILING, WDR, DAY/NIGHT, HIGH RESOLUTION

Product Features

- Fully-Integrated Enclosure with Camera and Lens
- 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
- Includes Composite and Unshielded Twisted Pair (UTP) Outputs
- Rugged, High-Impact, Vandal-Resistant, Tamper-Resistant Hardware
- Service Connector for Video Output
- Thermostatically Controlled Heater
- 12 VDC or 24 VAC Operation, Autosensing
- Microporous Membrane Vent for Enhanced Ingress Protection

CEILING MOUNTED

CORNER MOUNTED WITH
ICS210-CM CORNER MOUNT

The **IS210 Series Camclosure® Integrated Camera System** incorporates a camera and lens package into a small, "wedge" style enclosure. The system is quick and easy to install in a variety of indoor or outdoor applications. It is ideal for residential, office, mall, hospital, school, parking garage, correction and detention, and other medium-security installations subject to vandalism.

The **IS210 Series** is designed with a microporous membrane vent that equalizes the internal and external pressure differential of the enclosure. The vent offers enhanced ingress protection by repelling water and dust, yet allows for the free passage of vapors to prevent condensation within the enclosure.

The **IS210 Series System** can be mounted directly to a wall, ceiling, or corner using the optional ICS210-CM Corner Mount. Installation options include a fixed or adjustable mounting; an adjustable pattern increases the pan adjustment 24 degrees.

Camera Modules

The **IS210 Series Camclosure Integrated Camera System** offers a large selection of camera and lens options. Available camera modules include the following options:

- **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 resolution (540 TVL)** color camera with auto iris, varifocal lens or fixed iris lens; application examples include all general purpose environments.

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U.S. Patents D476,025; 6,715,939 B2; 6,805,498 B2

GENERAL

Construction	Aluminum base and cover, steel camera mounting bracket
Finish	Light gray polyester powder coat
Unit Weight	2.20 lb (1.00 kg)
Shipping Weight	4.0 lb (1.81 kg)

ELECTRICAL

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

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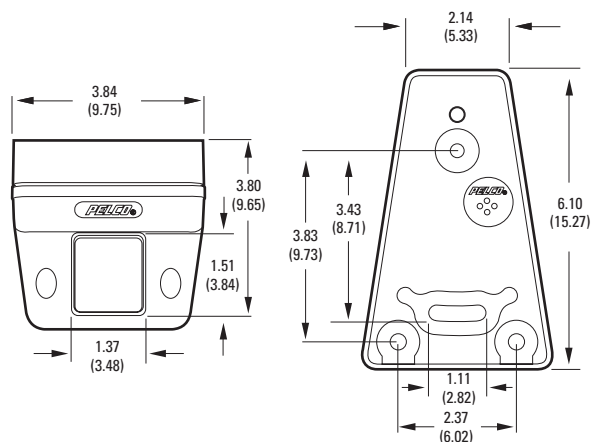
MECHANICAL

Cable Entry	1, 3/4-inch (1.9 cm) threaded conduit opening on rear; 1, 5/8-inch (1.58 cm) opening through gasket on base
Pan/Tilt Adjustment	Manual
Pan	±10° pan; additional 24° pan adjustment when installing using the adjustable mounting pattern in base
Tilt	5° above horizontal to 20° below horizontal

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

ENVIRONMENTAL

Environment	Low temperature, indoor/outdoor
Operating Temperature	-50° to 122°F (-46° to 50°C); de-ices to 25°F (-4°C) thermostat operation heater is thermostatically controlled to activate ON at 50°F (10°C) and OFF at 80°F (27°C)

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

CERTIFICATIONS/RATINGS/PATENTS

- CE, Class B
- FCC, Class B
- UL/cUL Listed
- C-Tick
- Meets NEMA Type 4X and IP66 standards
- IEC 60068-2-27 Shock Certified
- IEC 60068-2-30 Humidity Certified
- IEC 60068-2-6 Vibration Certified
- ISTA Shipping Standard
- U.S. Patents D475,025; 6,715,939 B2; 6,805,498 B2

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 - 7500°K	Auto or manual (DIP switch), 2500°K - 9500°K	Auto or manual (DIP switch), 2800°K - 7500°K	Auto or manual (DIP switch), 2500°K - 9500°K
Backlight Compensation	Auto	ON/OFF (DIP switch)	Auto	ON/OFF (DIP switch)

LENS SPECIFICATIONS

	Varifocal With Auto Iris				Fixed Focal Without Iris		
Series	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
Format Size	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
Operation Iris Focus Zoom	Auto Manual Manual	Auto Manual Manual	Auto Manual Manual	Auto Manual Manual	N/A Manual N/A	N/A Manual N/A	N/A Manual N/A
Angle of View* Horizontal Diagonal Vertical	100.4° to 31.6° 131.6° to 39.6° 72.8° to 23.8°	32.4° to 13.6° 41.4° to 17.2° 23.8° to 10.2°	95.0° to 30.2° 123.6° to 37.6° 69.0° to 22.6°	30.6° to 13.0° 39.2° to 16.4° 22.6° to 9.8°	90.2° 120.0° 65.4°	72.9° 92.0° 54.1°	40.1° 53.0° 30.4°

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

SYSTEM MODELS AND RELATED PRODUCTS

SYSTEM MODEL NUMBERS

Camera Type	Lens Type	NTSC	PAL
Color Day/Night with WDR	3~9.5 mm with auto iris	IS210-DWV9	
	9~22 mm with auto iris	IS210-DWV22	
Color Day/Night	3~9.5 mm with auto iris	IS210-DNV9	IS210-DNV9X
	9~22 mm with auto iris	IS210-DNV22	IS210-DNV22X
Color WDR	3~9.5 mm with auto iris	IS210-CWV9	
	9~22 mm with auto iris	IS210-CWV22	
Color, High Resolution	3 mm	IS210-CH3	IS210-CH3X
	3.6 mm	IS210-CH3.6	IS210-CH3.6X
	6 mm	IS210-CH6	IS210-CH6X
	3~9.5 mm with auto iris	IS210-CHV9	IS210-CHV9X
	9~22 mm with auto iris	IS210-CHV22	IS210-CHV22X

OPTIONAL ACCESSORIES

ICS210-CM — Corner mount specifically designed for the 210 Series system; ideal when installing the IS210 in a tight area such as a stairwell, hallway, or elevator.

IS-SC — 4-foot service/monitor cable; compatible with any standard monitor BNC connector

RECOMMENDED POWER SUPPLIES

TF2000 — Power supply for one 24 VAC camera, 20 VA
MCS Series — Multiple 24 VAC camera power supply, indoor
MCS*E Series — Multiple 24 VAC camera power supply, indoor
WCS Series — Single/multiple 24 VAC camera power supply, outdoor