ICS200 Series Camclosure® Camera System
INDOOR/OUTDOOR, WALL/CEILING

Product Features

- Fully-Integrated Enclosure With Camera and Lens Package
- Rugged, High-Impact and Vandal-Resistant
- Easy to Install; Camera Module Easy to Remove
- Mounts to Ceiling, Wall or Corner
- Tamper-Resistant Hardware
- Circuitry Protected Against Incorrect Jumper Placement
- Concealed Cabling
- 12 VDC or 24 VAC Operation
- Low-Temperature Operation to -50°F (-46°C); De-ices to -10°F (-23°C)
- Clear Window
- NTSC/PAL or EIA/CCIR Camera Formats
- All Color Cameras Feature Digital Signal Processing
- Color and Monochrome Cameras Available with 2.9 mm, 3.6 mm, 6 mm, 8 mm, or 12 mm Fixed Focal Lenses
- Standard and High Resolution Color Cameras Available with Fixed Focal Auto Iris Lenses
- Varifocal Lenses of 3-6 mm or 4-9 mm with Auto Iris, Available with High Resolution Color Camera
- Meets NEMA Type 4 and IP66 Standards When Installed with Supplied Mounting Plate

CEILING MOUNTED

CORNER MOUNTED WITH ICS200-CM CORNER MOUNT

- AC Line Lock with All Color Cameras in 24 VAC Operation
- All Lenses, Except Varifocals, are Pre-focused at the Factory
- Conduit Ready (3/4-inch NPT)

The **ICS200 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 **ICS200 Series System** can be mounted directly to a wall, ceiling, or corner using the optional ICS200-CM Corner Mount. Installation options include using a fixed or adjustable mounting pattern. An adjustable pattern increases the pan adjustment 24 degrees.

The **ICS200 Series Integrated Camera System** has a manual pan adjustment of ±10 degrees and manual tilt adjustment of 5 degrees above horizontal to 20 degrees below horizontal. The unit is factory set for 24 VAC operation, but can be configured for 12 VDC with just a simple jumper adjustment.

Camera options include 1/3-inch format CCD color imager (standard or high resolution) and monochrome imager (standard resolution) with fixed focal length lenses of 2.9 mm, 3.6 mm, 6 mm, 8 mm, and 12 mm. Color camera lens options include fixed focal without iris, fixed focal with auto iris, or varifocal with auto iris. Cameras with a varifocal lens have a 1/4-inch format high resolution CCD color imager.

U.S. Patent D-476,025

International Organization for Standardization; Registered ISO 9001

TECHNICAL SPECIFICATIONS

ELECTRICAL

Input Voltage	12 VDC or 24 VAC (±10%)
Power Consumption	
Camera	Less than 3 watts
Heaters	10 watts when active; thermostatically controlled
Video Connector	BNC

GENERAL

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

ENVIRONMENTAL

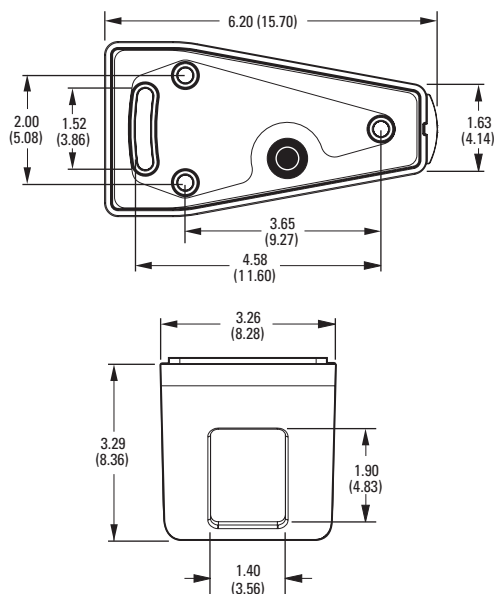|	
Environment	Low temperature, indoor/outdoor
Operating Temperature	-50° to 122°F (-46° to 50°C); de-ices to -10°F (-23°C)
Thermostat Operation	Heater is thermostatically controlled to activate on at 50°F (10°C) and off at 80°F (27°C)

PHYSICAL

Construction	Aluminum base and cover, steel camera mounting bracket
Finish	Gray polyester powder coat
Unit Weight	1.25 lb (0.57 kg)
Shipping Weight	2.0 lb (0.90 kg)

CERTIFICATIONS/RATINGS/PATENTS

- CE and FCC, Class A (models with monochrome cameras only)
- CE and FCC, Class B (models with color cameras only)
- UL Listed
- UL Listed to Canadian safety standards
- Meets NEMA Type 4, IP66 standards when installed with supplied mounting plate
- Tested in accordance with MIL-STD 810E as follows:
  – Shock test; Section 516.4 (exceeds IEC 68-2-27)
  – Humidity test; Sections 520.1 and 507.3 (exceeds IEC 68-2-30)
  – Vibration test; Section 514.4 (exceeds IEC 68-2-6)
- ASTM Shipping Standard
- ISTA Shipping Standard

All tests are performed in accordance with ISO Guide 25 and ANSI/NCSL Z540-1.

- U.S. Patent D-475,025

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

OPTIONAL MOUNT

ICS200-CM	Corner mount specifically designed for the 200 Series system. Perfect for installing the ICS200 in a tight area such as a stairwell, hallway, or elevator.

RECOMMENDED POWER SUPPLIES
(For use with 24 VAC models only)

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

TECHNICAL SPECIFICATIONS

CAMERA SPECIFICATIONS

	Black-White Standard Resolution Fixed, Without Iris (Models ICSxxx-**MA**x/ ICSxxx-**MC**x)	Color Standard Resolution Fixed, Without Iris (Models ICSxxx-**CA**x/ ICSxxx-**CC**x)	Color Standard Resolution Fixed, Auto Iris (Models ICSxxx-**CA**x**A**/ ICSxxx-**CC**x**A**)	Color High Resolution Fixed, Without Iris (Models ICSxxx-**CR**x/ ICSxxx-**CS**x)	Color High Resolution Fixed, Auto Iris (Models ICSxxx-**CR**x**A**/ ICSxxx-**CS**x**A**)	Color High Resolution Varifocal, Auto Iris (Models ICSxxx-**CRV**x**A**/ ICSxxx-**CSV**x**A**)
Signal System	EIA or CCIR	NTSC or PAL	NTSC or PAL	NTSC or PAL	NTSC or PAL	NTSC or PAL
Imaging Device	1/3-inch CCD	1/3-inch Interline Color CCD	1/3-inch Interline Color CCD (Hyper HAD™)	1/3-inch Interline Color CCD	1/3-inch Interline Color CCD (Hyper HAD™)	1/4-inch Interline Color CCD (Hyper HAD™)
Scanning System	2:1 Interlace	2:1 Interlace	2:1 Interlace	2:1 Interlace	2:1 Interlace	2:1 Interlace
Sync System	Internal	12 VDC: Internal 24 VAC: External (VD Lock)	12 VDC: Internal 24 VAC: External (VD Lock)	12 VDC: Internal 24 VAC: External (VD Lock)	12 VDC: Internal 24 VAC: External (VD Lock)	12 VDC: Internal 24 VAC: External (VD Lock)
Horizontal Resolution	EIA: 420 TV lines CCIR: 420 TV lines	NTSC: 350 TV lines PAL: 350 TV lines	NTSC: 330 TV lines PAL: 320 TV lines	NTSC: 470 TV lines PAL: 460 TV lines	NTSC: 450 TV lines PAL: 440 TV lines	NTSC: 480 TV lines PAL: 480 TV lines
Signal-to-Noise Ratio	50 dB	48 dB	48 dB	48 dB	48 dB	48 dB (AGC Off)
Min. Illumination Sensitivity	0.1 lux (f2.0)	1 lux (f2.0)	1 lux (f2.0)	1 lux (f2.0)	1 lux (f2.0)	Less than 1.2 lux (f1.2)
Video Out	1 Vp-p Composite (75 ohms)	1 Vp-p Composite (75 ohms)	1 Vp-p Composite (75 ohms)	1 Vp-p Composite (75 ohms)	1 Vp-p Composite (75 ohms)	1 Vp-p Composite (75 ohms)
Gain Control	Auto	Auto	Auto	NTSC: Auto PAL: Manual	Auto	On/Off by DIP switch (0-20 dB)
Exposure	Electronic Shutter (1/60 - 1/100,000)	Electronic Shutter (1/60 - 1/100,000)	Automatic control w/DC Iris meter (1/60 - 1/100,000)	Electronic Shutter (1/60 - 1/100,000)	Automatic Control w/DC Iris meter (1/60 - 1/100,000)	Electronic Shutter (1/60 - 1/100,000)
White Balance	Not applicable	Auto	Auto	Auto	Auto	Auto or manual (switch selectable)
Backlight Compensation	Auto	Auto or manual (switch selectable)	Auto or manual (switch selectable)	Auto or manual (switch selectable)	Auto or manual (switch selectable)	Auto; adjusts AGC and AES
Power Source*	12 VDC, 24 VAC	12 VDC, 24 VAC	12 VDC, 24 VAC	12 VDC, 24 VAC	12 VDC, 24 VAC	12 VDC, 24 VAC

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

LENS SPECIFICATIONS

	Fixed Focal Without Iris										Varifocal With Auto Iris	
Camera	Color	B-W	Color	B-W	Color	B-W	Color	B-W	Color	B-W	Color, High Resolution only	
Focal Length	2.9 mm	3.0 mm	3.6 mm		6.0 mm		8.0 mm		12.0 mm		3-6 mm	4-9 mm
Format Size	1/3-inch		1/3-inch		1/3-inch		1/3-inch		1/3-inch		1/4-inch	—
Relative Aperture (F)	2.0		2.0		1.8	2.5	1.8	2.5	2.0		1.2 to 1.5	1.6 to 2.4
Operation												
Iris	N/A		N/A		N/A		N/A		N/A		Auto	Auto Iris
Focus	Manual		Manual		Manual		Manual		Manual		Manual	Manual
Zoom	N/A		N/A		N/A		N/A		N/A		Manual	Manual
Angle of View**												
Horizontal	90°	87°	74°		42°	38°	32°	29°	21°		72° to 36°	51.8° to 23.8°
Diagonal	—	—	—	—	—	—	—	—	—	—	96° to 46°	66.1° to 29.7°
Vertical	69°	67°	55°		33°	30°	25°	23°	17°		52° to 26°	38.3° to 17.8°

	Fixed Focal With Auto Iris		
Camera	Color	Color	Color
Focal Length	6.0 mm	8.0 mm	12.0 mm
Format Size	1/3-inch	1/3-inch	1/3-inch
Relative Aperture (F)	1.8	1.8	1.8
Operation			
Iris	Auto	Auto	Auto
Focus	Manual	Manual	Manual
Zoom	N/A	N/A	N/A
Angle of View**			
Horizontal	42°	32°	21°
Diagonal	—	—	—
Vertical	33°	25°	17°

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

ICS200 SERIES SYSTEM MODELS

Camera Type	Lens	Lens Type	NTSC	PAL	EIA	CCIR
Color, High Resolution	2.9 mm	Fixed, without iris	ICS200-CR3	ICS200-CS3	—	—
	3.6 mm	Fixed, without iris	ICS200-CR3.6	ICS200-CS3.6	—	—
	6 mm	Fixed, without iris	ICS200-CR6	ICS200-CS6	—	—
		Fixed, auto iris	ICS200-CR6A	ICS200-CS6A	—	—
	8 mm	Fixed, without iris	ICS200-CR8	ICS200-CS8	—	—
		Fixed, auto iris	ICS200-CR8A	ICS200-CS8A	—	—
	12 mm	Fixed, without iris	ICS200-CR12	ICS200-CS12	—	—
		Fixed, auto iris	ICS200-CR12A	ICS200-CS12A	—	—
	3-6 mm	Varifocal, auto iris	ICS200-CRV3A	ICS200-CSV3A	—	—
	4-9 mm	Varifocal, auto iris	ICS200-CRV4A	ICS200-CSV4A	—	—
Color, Standard Resolution	2.9 mm	Fixed, without iris	ICS200-CA3	ICS200-CC3	—	—
	3.6 mm	Fixed, without iris	ICS200-CA3.6	ICS200-CC3.6	—	—
	6 mm	Fixed, without iris	ICS200-CA6	ICS200-CC6	—	—
		Fixed, auto iris	ICS200-CA6A	ICS200-CC6A	—	—
	8 mm	Fixed, without iris	ICS200-CA8	ICS200-CC8	—	—
		Fixed, auto iris	ICS200-CA8A	ICS200-CC8A	—	—
	12 mm	Fixed, without iris	ICS200-CA12	ICS200-CC12	—	—
		Fixed, auto iris	ICS200-CA12A	ICS200-CC12A	—	—
B-W, Standard Resolution	3.0 mm	Fixed, without iris	—	—	ICS200-MA3	ICS200-MC3
	3.6 mm	Fixed, without iris	—	—	ICS200-MA3.6	ICS200-MC3.6
	6 mm	Fixed, without iris	—	—	ICS200-MA6	ICS200-MC6
	8 mm	Fixed, without iris	—	—	ICS200-MA8	ICS200-MC8
	12 mm	Fixed, without iris	—	—	ICS200-MA12	ICS200-MC12

LENS PACK OPTIONS

Lens packs offer the added convenience of easily changing a camera's field of view by simply changing the lens.

All fixed focal lenses without iris (2.9 mm to 12 mm) are interchangeable with any camera module. Fixed focal auto iris and varifocal lenses are not interchangeable.

Variety Pack*
13FFD-V5PAK   Variety package of five lenses, one each 2.9 mm, 3.6 mm, 6 mm, 8 mm, and 12 mm

*Fixed focal lenses, without iris.

Single Lens Pack*
13FF3D	2.9 mm lens and mount
13FF3.6D	3.6 mm lens and mount
13FF6D	6 mm lens and mount
13FF8D	8 mm lens and mount
13FF12D	12 mm lens and mount

Four Lens Pack*
13FF3D-4PAK	Package of four 2.9 mm lenses and mounts
13FF3.6D-4PAK	Package of four 3.6 mm lenses and mounts
13FF6D-4PAK	Package of four 6 mm lenses and mounts