



HS2100 Ceiling Enclosure




C1465M-B (3/21)


Important Safety Instructions

- 1. Installation and servicing should be done only by qualified service personnel and conform to all Local codes.
- 2. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
- 3. Only use replacement parts recommended by Pelco.
- 4. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.
- 5. The installation method and materials should be capable of supporting four times the weight of the enclosure, pan/tilt, camera and lens combination.

The product and/or manual may bear the following marks:



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION:
RISK OF ELECTRIC SHOCK. DO NOT OPEN.

Description

The HS2100 is a low-profile, high-security ceiling enclosure with riveted back box for mounting in fixed or dropped ceilings. The unobtrusive, compact design complements any business or office decor and provides maximum surveillance for fixed applications when using CCD cameras.

The HS2100 is engineered for ease of installation and service. The upper section, mounted above the ceiling, is constructed of aluminum. Because of its lightweight design, the upper section can be mounted directly on a ceiling tile without the use of additional mounting plates.

The lower section is made of steel to provide extra security. It is hinged to provide convenient access for camera and lens adjustments. The adjustable camera mounting sled allows the camera to be positioned vertically or horizontally, depending on the camera size.

Installation

The following items are supplied:

- 1 Enclosure
- 1 Parts bag (Parts may be used to attach the camera to the mount.)
 - 1 Hex bolt, 1/4-20 x 1/2"
 - 1 Split washer
 - 1 Flat washer
- 1 Backup flanges to support the enclosure if adequate mounting support is not available or if enclosure is mounted in drop ceiling tiles
- 1 Pin-in-hex wrench to remove tamper-resistant screw

Recommended Tools

Pelco does not supply the basic tools needed for the installation process. The following tools are recommended:

- Small adjustable wrench
- Phillips screwdriver
- BNC crimp tool
- Wire stripper
- Wire cutter
- Coaxial cable stripper

BACK BOX INSTALLATION

To mount the HS2100, perform the following steps:

NOTE: Backup flanges have been supplied to support the enclosure if adequate mounting support is not available or if you are mounting the enclosure in drop ceiling tiles.

1. Determine the location and direction of the enclosure to be mounted. Ideally, the enclosure cutout should be parallel and adjacent, or perpendicular, to any ceiling structure. Avoid cutting into any ceiling structural members.
2. Unlock the enclosure cover by unscrewing the tamper-resistant screw (pin-in-hex wrench is included to remove tamper-resistant screw). Open the cover to expose the mounting holes in the flange.
3. Remove any appropriate knockouts.
4. Insert the enclosure into the opening and secure with the appropriate fasteners.

CAMERA AND LENS INSTALLATION

To mount the camera and lens, perform the following steps:

1. Mount the camera and lens onto the adjustable camera cradle. Adjust the position of the camera and lens to clear the enclosure cover when closed. Tighten the camera cradle fasteners.
2. Route the appropriate cables into the enclosure. Make all necessary electrical connections. Refer to Table A for the type of video coaxial cable to use. If the camera will use 24 VAC power, refer to Table B to determine the size of wire needed.
3. Close and lock the cover with the provided tamper-resistant screw.

Table A. Video Coaxial Cable Wiring Distances

Cable Type*	Maximum Distance
RG59/U	750 ft (229 m)
RG6/U	1,000 ft (305 m)
RG11/U	1,500 ft (457 m)

*Cable requirements:

75 ohms

All-copper center conductor

All-copper braided shield with 95-percent braid coverage

Table B. 24 VAC Wiring Distances

The following are the recommended maximum distances for 24 VAC applications and are calculated with a 10 percent voltage drop. (Ten percent is generally the maximum allowable voltage drop for AC-powered devices.)

Total VA	Wire Gauge							
	22 (0.4 mm ²)	20 (0.5 mm ²)	18 (1.0 mm ²)	16 (1.5 mm ²)	14 (2.5 mm ²)	12 (4.0 mm ²)	10 (6.0 mm ²)	
10	178 (54)	283 (86)	451 (137)	716 (218)	1142 (348)	1811 (551)	2880 (877)	Maximum distance from transformer to load
20	89 (27)	141 (42)	225 (68)	358 (109)	571 (174)	905 (275)	1440 (438)	
30	59 (17)	94 (28)	150 (45)	238 (72)	380 (115)	603 (183)	960 (292)	
40	44 (13)	70 (21)	112 (34)	179 (54)	285 (86)	452 (137)	720 (219)	
50	35 (10)	56 (17)	90 (27)	143 (43)	228 (69)	362 (110)	576 (175)	

EXAMPLE: An enclosure that requires 30 VA and is installed 94 feet (28 m) from the transformer would require a minimum wire gauge of 20 AWG.

NOTE: Distances are calculated feet; values in parentheses are meters.

Maintenance

Regularly scheduled maintenance will prolong the operational life and appearance of the enclosure. Clean the outer surface of the enclosure with a nonabrasive cleaning cloth and antistatic cleaner. Clean the viewing window with a mild, nonabrasive soap and water to maintain picture clarity. Do not use kerosene or similar substances that may damage the surface.

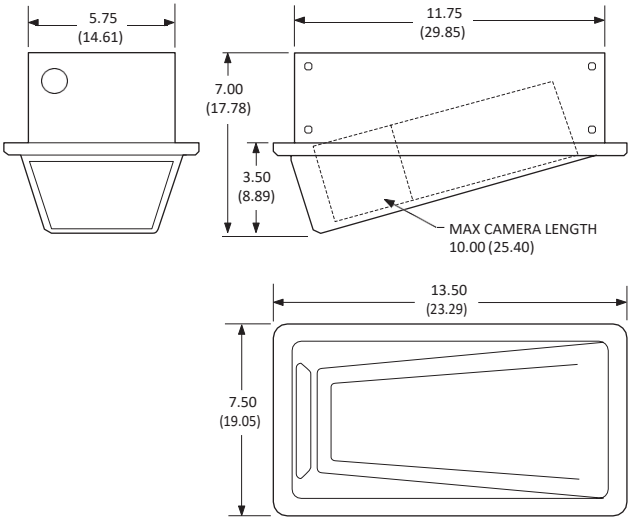
Specifications

GENERAL

Environment	Indoor only
Operating Range	32° to 120°F (0° to 49°C)
Weight	5.30 lb (2.41 kg)

MECHANICAL

Construction	
Upper section	5052-H32 aluminum
Lower section	16 gauge steel
Viewing window	0.25" (6.35 mm) thick, abrasion-resistant Lexan® polycarbonate resin thermoplastic
Finish	White polyester powder coat
Cable Entry	Two cable knockout holes
Dimensions	See dimension drawing
Lock	Tamper-resistant 8-32 screw (Pin-in-hex wrench included to remove tamper-resistant screw.)
Ceiling Mounting	Upper section flange-mounted to fixed ceiling or ceiling tile. Ceiling support rails are provided.
Maximum Camera/Lens Size	3" H x 4" W x 10" L (7.62 x 10.16 x 25.4 cm)* *Dimensions include BNC connector Length may vary if width and height of camera and lens are different.
Camera Mounting	Adjustable camera sled capable of supporting a maximum weight of 10 lb (4.53 kg). Sled can be adjusted horizontally or vertically.
(Design and product specifications are subject to change without notice.)	



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

REVISION HISTORY

Manual #	Date	Comments
C1465M	6/97	Original version.
C1465M-A	9/06	Updated to new format. Updated viewing window specifications per ECO 05-13392.
C1465M-B	3/21	Updated