

CP-6408-21-IA

CP-6402-41-IA





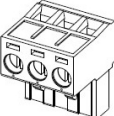
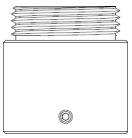

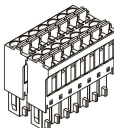


CP-6408-31-IA



1 Check Contents

The camera kit includes (images not to scale):

<p>RJ45 insertion tool</p> 	<p>M5x8 security screw with rubber gasket</p> 	<p>safety lanyard (attached to pendant cap)</p> 
<p>rubber cable gland</p> 	<p>three-pin connector for 24V AC terminal block</p> 	 <p>PF-to-NPT thread adapter</p>
<p>cable gland bracket with screws attached</p> 	<p>14-pin connector for alarm and I/O terminal block</p> 	

If any of these items are missing or damaged, contact your dealer or [Teledyne FLIR Support](#).

2 Select a Location



Warnings

- Placing a camera in an environment subject to extremely high temperature can result in an explosion or the leakage of flammable liquid or gas.
- Subjecting the camera to extremely low air pressure can result in an explosion or the leakage of flammable liquid or gas.
- The camera must be installed by qualified personnel and the installation should conform to all local codes.

The camera can be mounted outdoors or indoors.

The camera's operating temperature range is -40°C to 50°C (-40°F to 122°F) with heater; 10-90% non-condensing humidity.



Tip

To support video analytics (VA), mount the camera so that it can accurately detect and classify objects. For VA mounting and scene considerations, see the camera's installation and user guide.

Make sure you have the required accessories and tools. Make sure that the location provides a suitable method for routing cables to and from the camera.

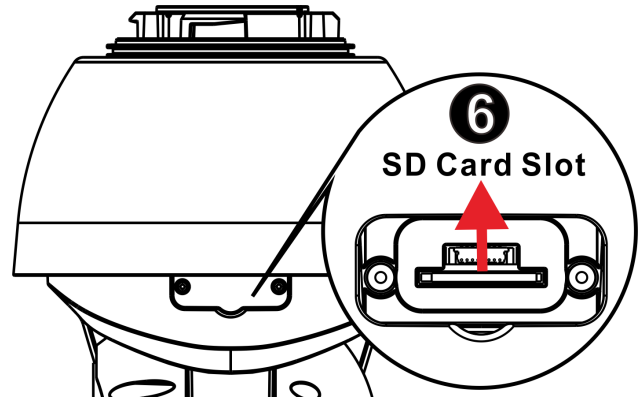
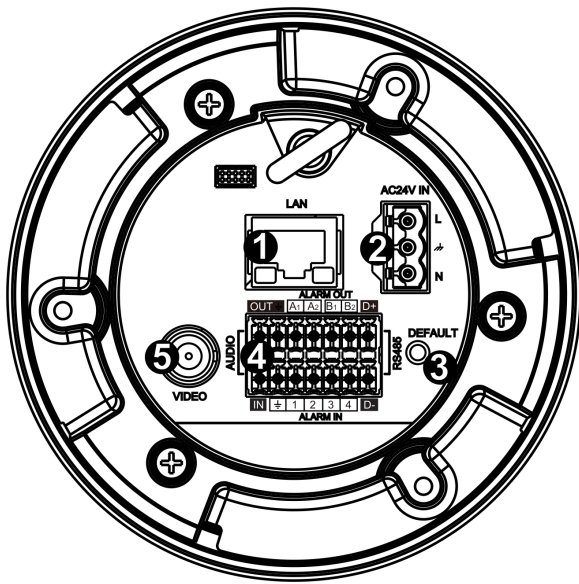
3 Connect the Camera



To install the camera, Teledyne FLIR recommends connecting the camera on a bench or in a lab and configuring it for networking before mounting and aiming it. However, circumstances can dictate adjusting the sequence of the steps. For example, you can mount the camera before configuring it for networking.

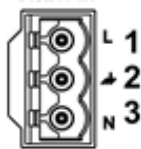


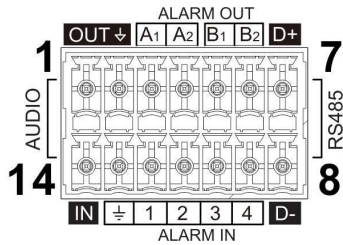
Warning

The camera itself does not have a power on/off switch. Do not supply power to the camera until you have completely finished connecting it.



Connector		Connection
1	LAN RJ45 w/LEDs	For a 10/100/1000 Mbps Ethernet and PoE connection, attach an Ethernet cable from the network switch to the LAN RJ45 connector. Verify that the LAN connector LEDs are steady green and flashing yellow.
 Warning		The PoE unit and all interconnected equipment must be installed indoors within the same building, including all PoE-powered network connections, as described by Environment A of the IEEE 802.3af standard.
2	AC24V IN 3-pin power terminal block	If using an external 24V AC power supply, attach wires from the power supply to the three-pin connector included in the camera kit according to the pin assignment below. Then, attach the connector to the terminal block.
 Warning		The power cord to the 24V AC power supply unit must be connected to a socket outlet with an earthing connector.
3	DEFAULT	To restore the camera to its factory defaults, use a proper tool to press the default button for at least 20 seconds.
4	14-pin alarm and I/O terminal block	Attach wires from external alarm, audio, and other I/O devices to the 14-pin I/O plug included in the camera kit according to the pin assignment below. Then, attach the connector to the terminal block.
5	VIDEO	BNC connector for analog video output.
6	microSD card slot	For video clip and snapshot recording and file storage, insert a microSD / SDHC / SDXC card (up to 1 TB) in the card slot. When the camera is powered on, do not remove the microSD card.

3-Pin Power Connector	Pin	24V AC
	1	L (Live; white; positive)
	2	Ground (Earth)
	3	N (Neutral; black; negative)

14-Pin Alarm and I/O Connector	Pin	Connection	Pin	Connection
	1	Audio-Out	8	RS-485 D-
	2	Ground (Audio I/O)	9	Alarm-In 4
	3	Alarm-Out A1	10	Alarm-In 3
	4	Alarm-Out A2	11	Alarm-In 2
	5	Alarm-Out B1	12	Alarm-In 1
	6	Alarm-Out B2	13	Ground (Alarm I/O)
	7	RS-485 D+	14	Audio-In



Warnings

- Do not connect an external power supply to the 14-pin I/O terminal block.
- This product contains a battery that is soldered to the PCB. There is a risk of explosion if the battery is replaced by an incorrect type. **Do not replace the battery.** The battery should be disposed of in accordance with the battery manufacturer's instructions.

4 Configure for Networking

To discover the camera on the network, Teledyne FLIR recommends using the FLIR Discovery Network Assistant (DNA) tool, which does not require a license to use, and is [a free download from the Teledyne FLIR website](#). After downloading the DNA ZIP file, extract it.

You can configure the camera using the DNA tool, the camera's web page, or a supported VMS.

	DNA tool	Camera's web page
Discover camera IP address	•	
Configure IP address, mask, and gateway	•	•
Change user credentials	•	•
Configure DNS settings, MTU, and Ethernet speed		•
Change video format	•	•
Configure more than one camera at the same time	•	

While the software is open, click the Help icon .

For information about using the camera's web page to configure the camera, see the camera's installation and user guide. For information about using a supported VMS to configure the camera, see the VMS documentation.

By default, DHCP is enabled on the camera and a DHCP server on the network assigns the camera an IP address. If the camera cannot connect to a DHCP server, the camera's default IP address is 192.168.0.250. For example, if the camera is managed by FLIR Horizon or Meridian VMS and the VMS is configured as a DHCP server, the VMS automatically assigns the camera an IP address.

If the camera is managed by FLIR Latitude VMS or is on a network with static IP addressing, you can manually specify the camera's IP address using the DNA tool or the camera's web page.

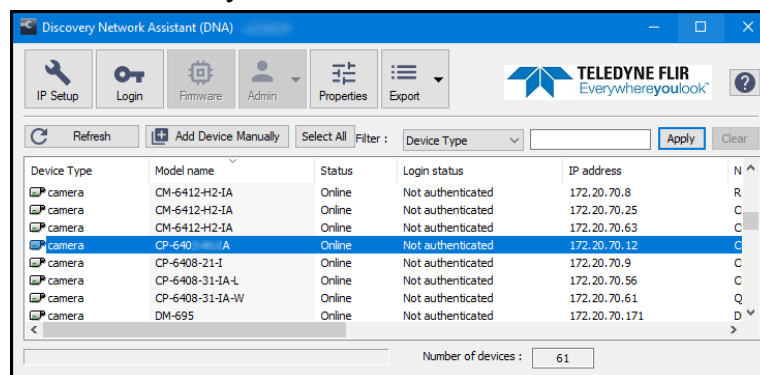
To manually specify the camera's IP address using the DNA tool:

a. Make sure the camera and the PC are on the same LAN segment.

b. Run the DNA tool (DNA.exe) by double-clicking .



The Discover List appears, showing compatible devices on the LAN segment and their current IP addresses.

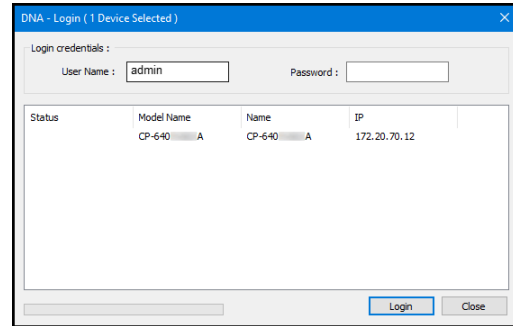
c. In the DNA Discover List, verify that the camera's status is Online.



If this is the first time you are configuring the camera or if it is the first time after resetting the camera to its factory defaults, DNA automatically logs in to the camera with user name *admin* and its default password (*admin*).


If the *admin* user's password is not the default password, you need to authenticate the camera.

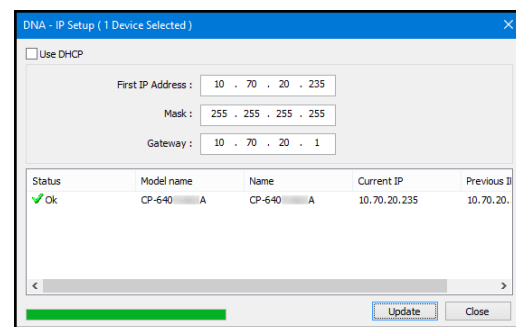
1. In the DNA Discover List, select the camera and then click **Login** .
2. In the **DNA - Login** window, type *admin* or the name of any user assigned Admin privileges; and the password.
If necessary, contact the person who configured the camera's users.
3. Click **Login**, wait for  Ok status to appear, and then click **Close**.



Status	Model Name	Name	IP
Ok	CP-640 A	CP-640 A	172.20.70.12

- d. Verify that the camera's Login status is Authenticated.
- e. Change the camera's IP address.

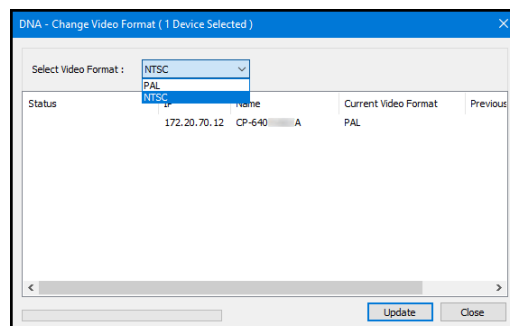
1. Right-click the camera and select **IP Setup**.
2. In the **DNA - IP Setup** window, clear *Use DHCP* and specify the camera's *IP address*. You can also specify the *Mask* (default: 255.255.255.0) and *Gateway*.
Then, click **Update**, wait for  Ok status to appear, and then click **Close**.



Status	Model name	Name	Current IP	Previous IP
Ok	CP-640 A	CP-640 A	10.70.20.235	10.70.20.

5 Change Video Format (Optional)

By default, NTSC is the camera's video format. You can change the camera's video format to PAL using the DNA tool.



- In the DNA Discover List, right-click the camera and select **Change Video Format**.
- In the **Change Video Format** window, select PAL. If Shutter WDR 30 FPS NTSC is the camera's current video format, it changes to Shutter WDR 25 FPS PAL. Likewise, if Linear 60 FPS NTSC is the camera's current video format, it changes to Linear 50 FPS PAL.
- Click **Update**, wait for Ok status to appear, and then click **Close**.

6 Install Mounting Hardware

- Install the mounting hardware for the camera according to the instructions for the hardware. For information about the mounting accessories available, see the camera's installation and user guide or the *FLIR Security Edge Devices Accessory Guide*.
- Route Ethernet, power, and I/O cables through the mounting hardware so that they are accessible when mounting the camera.

7 Waterproof the Camera

For information about waterproofing the camera, see the camera's installation and user guide. When the camera is installed according to those instructions, it is IP66-rated waterproof. When the camera is not installed according to those instructions, water can enter and damage it.

8 Mount and Secure the Camera

- Route the cables from the mounting hardware through the pendant cap and attach the pendant cap to the mounting hardware.
If you are using mounting hardware with an NPT outer thread, route the cables through the PF-to-NPT thread adapter included in the camera kit and then attach the thread adapter to the mounting hardware.
- To prevent the camera from falling, you need to secure it using the safety lanyard attached to the pendant cap. Attach the lanyard to the ring on the camera. For more information, see the camera's installation and user guide.
- According to the information in [Connect the Camera](#), connect the cables to the camera.
- Carefully insert the camera into the pendant cap and rotate the camera until it locks into place (1/3 turn).



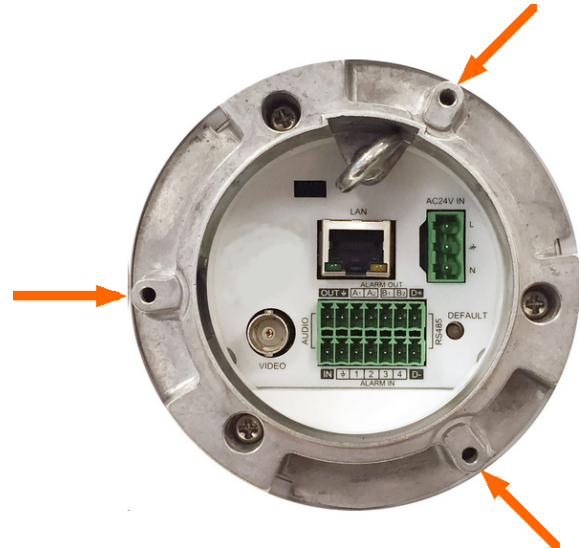
Warning

The metal locking mechanism carries the weight of the camera. If the camera is not locked into place, it could become loose and fall.

The screw that attaches the pendant cap to the camera needs to line up with one of the corresponding screw holes on the camera.



Pendant Cap Screw



Pendant Cap Screw Holes on Camera

- e. Securely tighten the pendant cap screw into the camera. The screw prevents the camera from rotating.
- f. Try to rotate the camera and make sure it is not possible to rotate the camera.



Warning

If the camera can be rotated, it could become loose and fall.

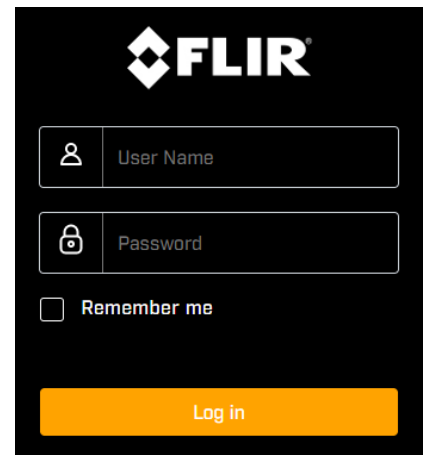
CP-6408-31-IA model: If you are installing an optional wash kit, mount and secure it according to the instructions in the camera's installation and user guide, and according to the wash kit's instructions manual.

9 Complete Camera Setup

To complete camera setup — for example, to format the microSD card — you need to access the camera's web page with the default *admin* user or with another user assigned Admin or Expert privileges. The camera web page supports the latest version of Google Chrome® and other popular web browsers.

To access the camera's web page:

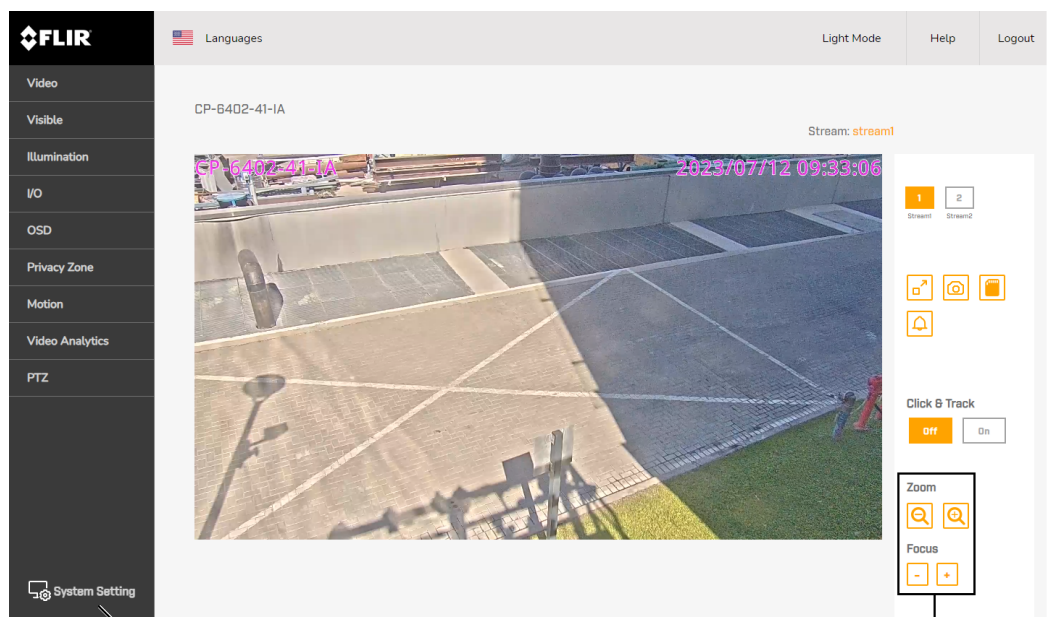
- a. Do one of the following:
 - In the Teledyne FLIR Discovery Network Assistant (DNA) tool, double-click the camera in the Discover List.
 - Type the camera's IP address in a browser's address bar (when the PC and the camera are on the same network). If you do not know the camera's IP address, you can use the DNA tool to discover it.
- b. On the login screen, enter a user name and password. If necessary, contact the person who configured the camera's users and passwords.



When logging in to the camera for the first time or for the first time after resetting the camera to its factory defaults:

1. Log in with user name *admin* and the default password, *admin*.
2. Specify a new password for *admin*:
 - must be 8-64 characters
 - can include the following special characters: @#~!\$&<>+ _.,*?
 - cannot include four-digit sequences (for example, 1234)
 - cannot include four repeating characters (for example, aaaa)
3. Log back in using the new password.

The camera's View Settings home page opens.



System Settings

Zoom & focus controls

Camera Web Page for Admin / Expert Users - Light Mode

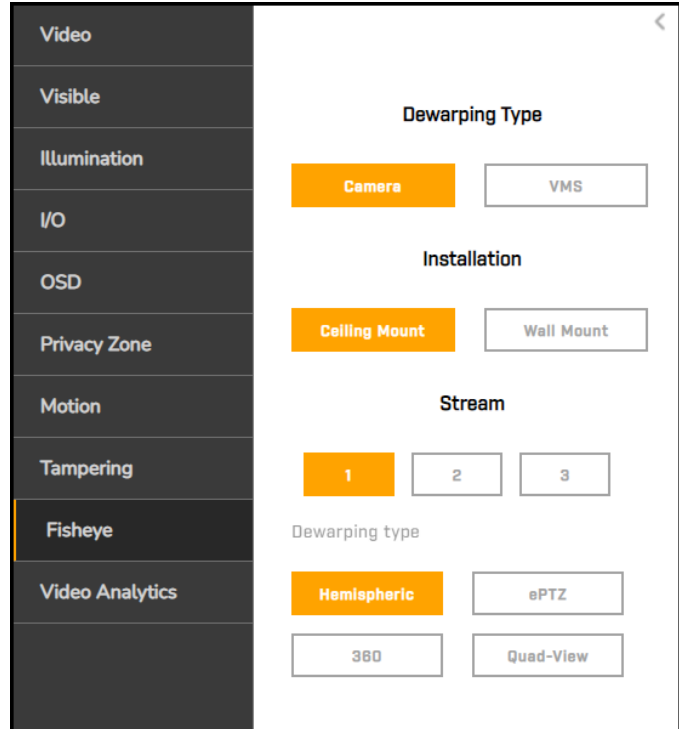
To adjust the zoom and focus:

Use the controls on the View Settings home page. They are available when a View Settings menu page is not open.

To configure the fisheye lens features:

- a. Open the Fisheye page.
- b. Configure the dewarping type:
 - **Camera (default)**—You can separately configure the Dewarping Type for each video stream.
 - **VMS**—See the VMS documentation.

Camera Dewarping Types
Hemispheric (default) —The camera streams its original, warped 360° image.
ePTZ —The camera streams a single image with electronic pan / tilt / zoom enabled. Using the mouse, click and drag the blue pointer ➡ that appears overlaid onto the live video.



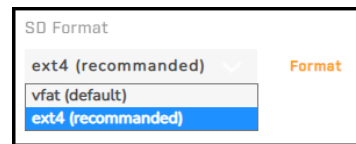
Fisheye Page - Default Settings

Installation	
Ceiling Mount (Default)	Wall Mount
360 —The camera streams two 180° images.	180 —The camera streams a single 180° image.
Quad-View —The camera streams four images with ePTZ enabled. You can separately and independently pan, tilt, and zoom each image.	Dual-View + 180 —The camera streams three images: two images with ePTZ enabled, and one 180° image.

To format the microSD card:

- a. Click **System Settings**. Then, open the SD Card page.

- b. Under SD Format, select *vfat* (default) or *ext4* (recommended).
- c. Click **Format**.



Additional Configuration Steps

Depending on installation and use, completing camera setup can also consist of adjusting the camera's zoom and focus; configuring the camera's video analytics; and configuring or modifying the default video stream and visible picture settings; network security settings; and alarm settings.

Many configuration steps can be performed before or after mounting the camera. However, some of them can or should only be performed after mounting the camera. For example, configure the camera's video analytics after mounting the camera.

For more information about configuring the camera, see the camera's installation and user guide.

10 Configure and Test the Optional Wash Kit and the Camera's Wiper - CP-6408-31-IA

If you have mounted and connected an optional wash kit for the CP-6408-31-IA model, configure and test it and the camera's wiper according to the kit's instructions manual and according to the camera's installation and user guide.



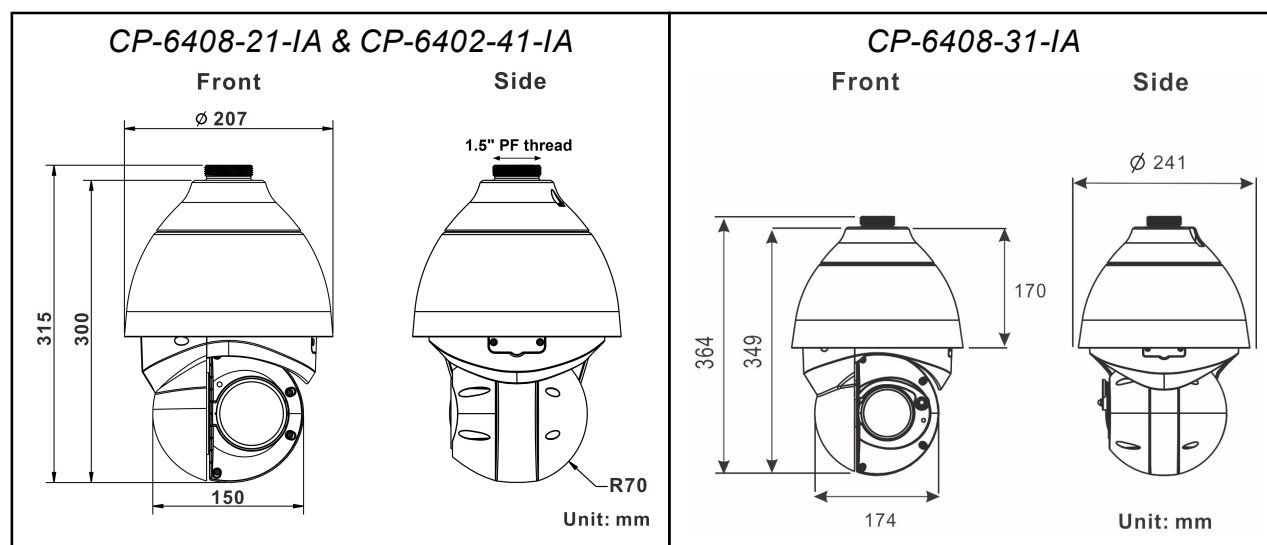
Caution

Before activating the wiper, make sure the lens windows are wet. Using the wiper when the windows are dry causes irreparable damage to the window coatings and voids the warranty.

11 Attach the Camera to a Supported VMS

After mounting the camera and discovering or defining its IP address, use VMS Discovery/Attach procedures to attach the camera to a supported VMS.

Camera Dimensions



Register the Product

Register the product at <https://customer.flir.com>.

For warranty information, see <https://www.flir.com/support-center/warranty/security/flir-security-product-warranties/>.