



# TruVision IP PTZ Camera Installation Guide

**Copyright** © 2016 United Technologies Corporation.

Interlogix is part of UTC Climate, Controls & Security, a unit of United Technologies Corporation. All rights reserved.

<b>Trademarks and patents</b>	The product name and logo are trademarks of United Technologies. Other trade names used in this document may be trademarks or registered trademarks of the manufacturers or vendors of the respective products.
<b>Manufacturer</b>	Interlogix 2955 Red Hill Avenue, Costa Mesa, CA 92626-5923, USA Authorized EU manufacturing representative: UTC Fire & Security B.V. Kelvinstraat 7, 6003 DH Weert, The Netherlands

**Certification**



**FCC compliance** **Class A:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This Device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**ACMA compliance** **Notice!** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**Canada** This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-0330 du Canada.

**European Union directives** **2004/108/EC (EMC directive):** Hereby, UTC Fire & Security declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC.



**2012/19/EU (WEEE directive):** Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info).

**Contact Information**

For contact information, see [www.interlogix.com](http://www.interlogix.com) or [www.utcssecurityproducts.eu](http://www.utcssecurityproducts.eu).

# **Content**

**Introduction** 4

Product overview 4

**Before you begin** 4

**Installation environment** 5

**Camera description** 6

**Connections** 7

**Install a camera** 10

Wall-mounted camera 10

TVP-1122/3122 wall-mount camera 13

Flush-mount camera 14

Surface-mount camera 17

Using the camera with an Interlogix NVR or Hybrid DVR or another system 21

Using the camera with TruVision Navigator 21

**Access the camera over the internet** 21

**Specifications** 23

**Pin definitions** 24

# Introduction

This installation guide provides basic information on setting up and using the camera. Detailed information on the cameras can be found in the configuration manual.

## Product overview

This is the installation guide for following TruVision IP PTZ camera models:

- TVP-1101 (1.3 MPX wall-mount, 20X, PAL)
- TVP-3101 (1.3 MPX wall-mount, 20X, NTSC)
- TVP-1102 (1.3 MPX surface-mount, 20X, PAL)
- TVP-3102 (1.3 MPX surface-mount, 20X, NTSC)
- TVP-1103 (1.3 MPX flush-mount, 20X, PAL)
- TVP-3103 (1.3 MPX flush-mount, 20X, NTSC)
- TVP-1104 (2 MPX wall-mount, 20X, PAL)
- TVP-3104 (2 MPX wall-mount, 20X, NTSC)
- TVP-1105 (2 MPX surface-mount, 20X, PAL)
- TVP-3105 (2 MPX surface-mount, 20X, NTSC)
- TVP-1106 (2 MPX flush-mount, 20X, PAL)
- TVP-3106 (2 MPX flush-mount, 20X, NTSC)
- TVP-1107 (2 MPX wall-mount, 30X, PAL)
- TVP-3107 (2 MPX wall-mount, 30X, NTSC)
- TVP-1122 (2 MPX wall-mount, 30X, IR, PAL)
- TVP-3122 (2 MPX wall-mount, 30X, IR, NTSC)

## Before you begin

Unpack everything. Check the items for damage, and verify that all items are included. The camera is shipped with the following items:

- Dome camera
- Installation Guide
- CD with the Configuration Manual and Device Manager

## Installation environment

When installing your camera, consider these factors:

- Place the camera in a secure location.
- Ensure that the camera is in a well-ventilated area.
- Do not expose the camera to rain or moisture.

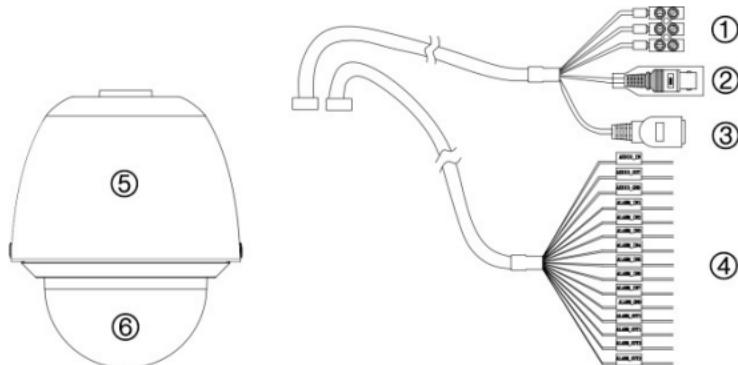
---

**Caution:** Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

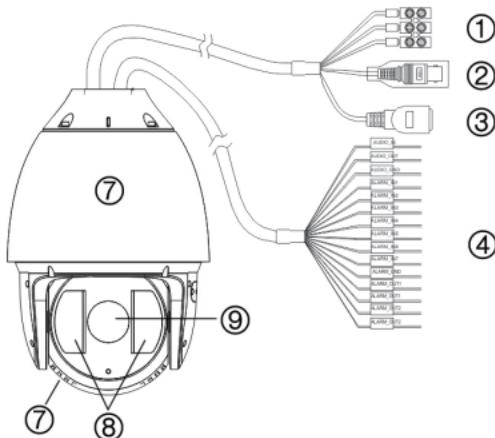
---

# Camera description

Figure 1: Overview of the dome camera (wall-mount shown)



TVP-1122/3122 cameras only:

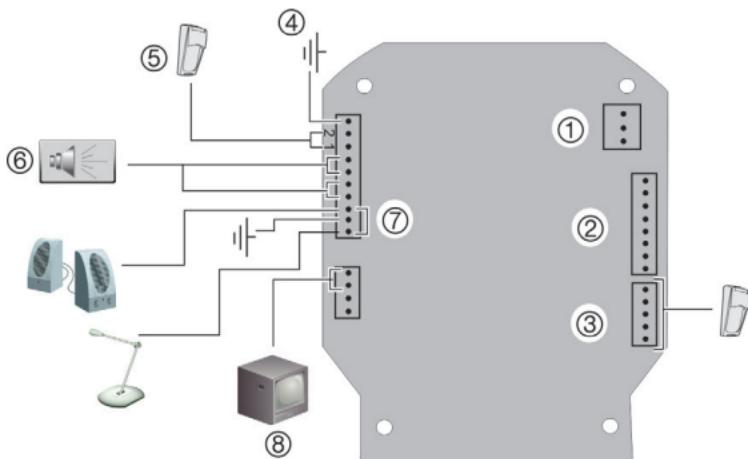


1. Power supply cord  
Connect 24 VAC power supply
2. Video output  
Connect the BNC connector to a CCTV monitor
3. Ethernet RJ45 connector.  
Connect to the network devices  
Connect to the Hi-PoE switch
4. Alarm input/outputs and audio in/out port
5. Housing
6. Bubble
7. Metal housing
8. IR LEDs
9. Lens cover

# Connections

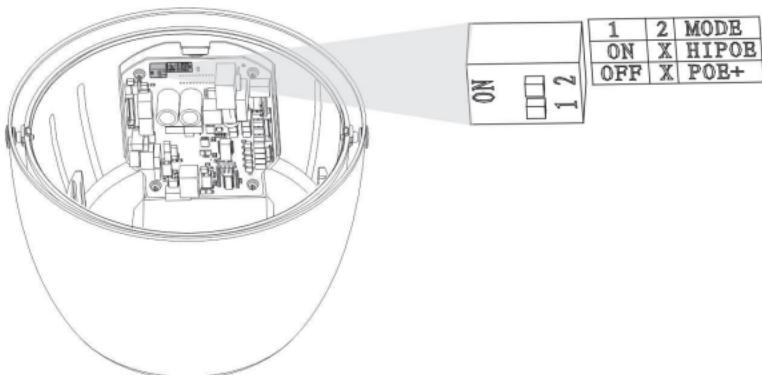
There are seven built-in alarm inputs to use as internal alarm triggers and two alarm built-in outputs in the camera housing. These connections do not apply to the TVP-1122/3122 cameras.

**Figure 2: Connections to the circuit board (excludes TVP-1122/3122)**



1. Power supply: Connect +24 VAC power supply and GND.
2. Pin port to RJ45 connector: Connect to the network.  
**Caution:** The RJ45 connector on the camera module is not for connecting the network. It is an RS-232 port for troubleshooting.
3. Alarm inputs 3 to 7: Connect to up to five alarm input devices.
4. GND
5. Alarm inputs 1 and 2: Connect to up to two alarm input devices.
6. Alarm outputs 1 and 2: Connect up to two output devices
7. AIN, AOUT: Connect audio input, audio output, and GND to the audio terminals.
8. VIDEO: Connect a CCTV monitor to the video terminal.

**Figure 3: Location of the switch to change PoE+ to High PoE for TVP-1101/3101, TVP-1104/3104 and TVP-1107/3107**



The High PoE can supply up to 40 W when the PoE+ can only output 25 W. The operating temperature for both PoE+ and High PoE is -30 to +65 °C (-22 to +149 °F).

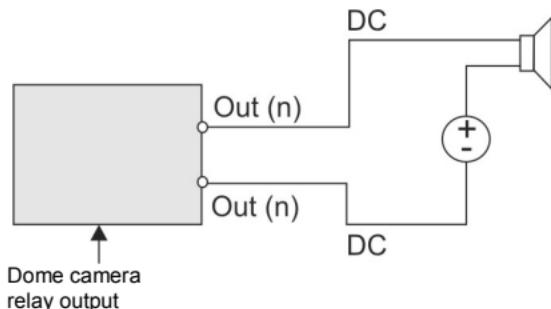
#### **Alarm input and output connections**

The alarm output can be used to turn on and off an external alarm device. Connect a 30 VDC/1 A external power supply to the alarm output. If using an AC power supply, an external relay must be used to prevent electric shock and damage to the device. See Figure 4 on page 9.

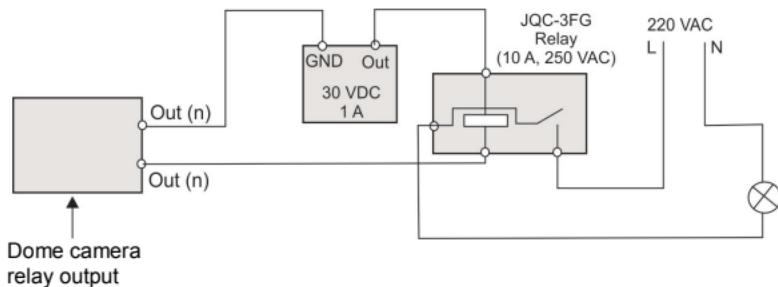
**Figure 4: External alarm output**

---

**Direct current:**



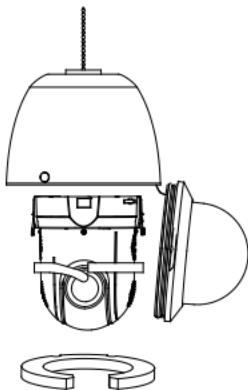
**Alternating current:**



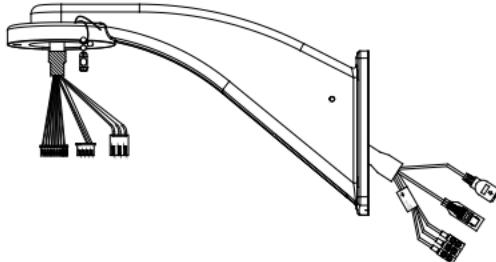
# Install a camera

## Wall-mounted camera

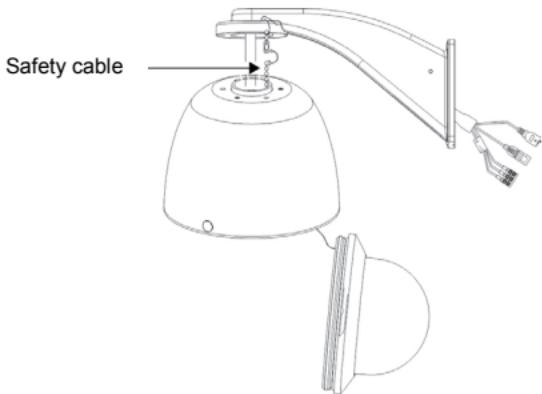
1. Prepare the mounting surface and install the camera bracket.
2. Unscrew the bubble from the camera and remove the protective tape from the PTZ module (excluding TVP-1122).
3. Press the two tabs on either side of the PTZ module and remove the module from the camera housing (excluding TVP-1122).



4. Route the cables from the wall-mounted bracket, as shown below.



5. Attach the safety cable to the bracket and connect the cables to the PCB of the module through the cable entry hole on top of the housing.



**Note:** If alarm and audio input/output relays are to be used, also connect them to the PCB of the module.

---

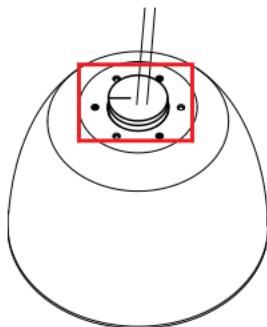
**Caution:** The safety cable is made of metal. Please ensure that it does not touch the PCB of the module.

---

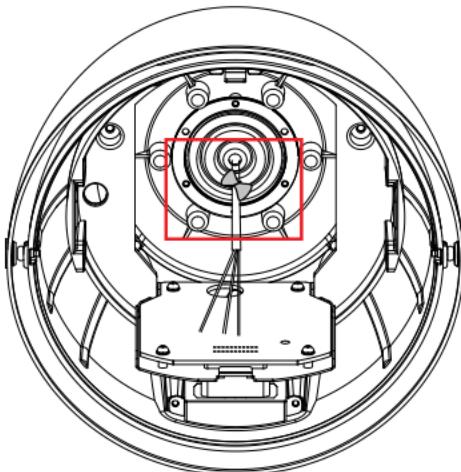
**Caution:** The RS-232 serial port on the camera is not a network connection.

---

6. Position the foam pad provided on top of the camera housing, as shown below.

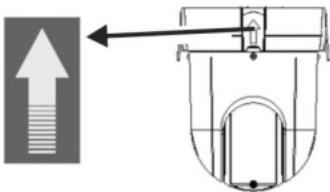


7. Attach one of the enclosed desiccant bags to the cables. There are two desiccant bags enclosed with the camera. You only need to use one. The other bag is in case a replacement is required.



8. Attach the camera housing to the bracket using the screws enclosed with the bracket.
9. Insert the PTZ module into the housing:

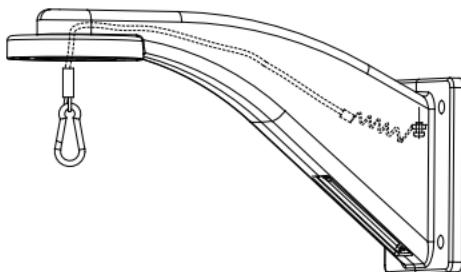
Position the tabs on the PTZ module by aligning the arrow label on the module with those on the housing (see below). The module should firmly snap into position. If using a SD card, insert it into the module before inserting the module into the housing.



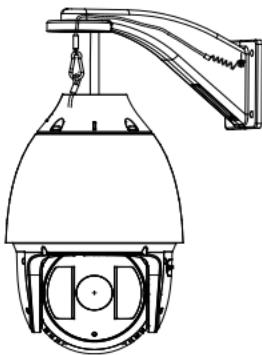
10. Re-attach the bubble by screwing it to the housing.
11. See “Access the camera over the internet” on page 21 to configure the camera over the internet. Refer to the Configuration Manual for detailed information.

### TVP-1122/3122 wall-mount camera

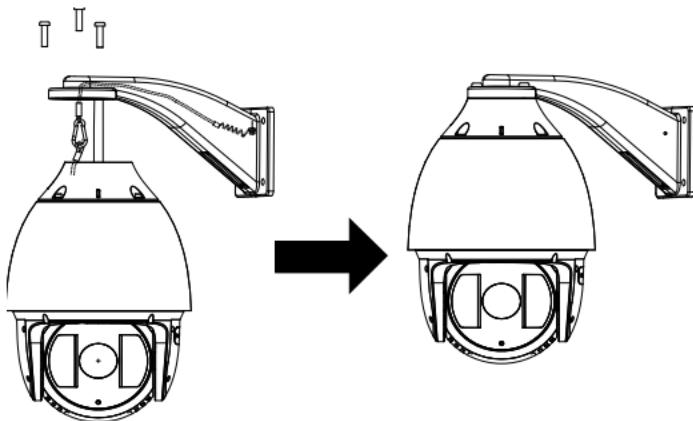
1. Prepare the mounting surface and install the camera bracket.
2. Replace the safety chain with the new one included in the package box.



3. Hook the safety chain on top of the camera’s housing, and route the cables through the GEA-102.



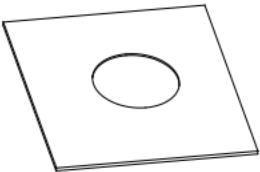
4. Attach the camera on the GEA-102 with the three screws provided.



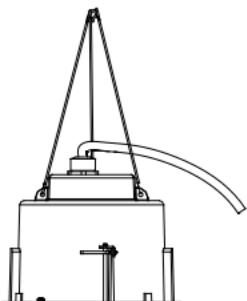
5. See “Access the camera over the internet” on page 21 to configure the camera over the internet. Refer to the Configuration Manual for detailed information.

## Flush-mount camera

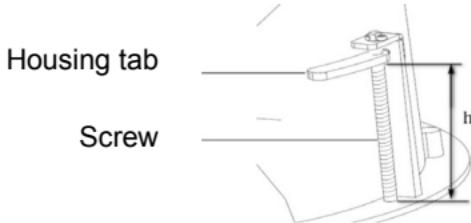
1. Drill a hole on the ceiling using the drill template.



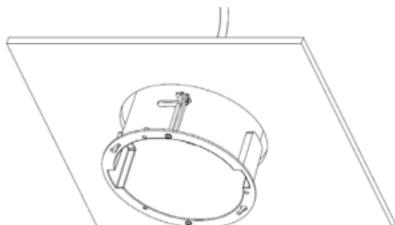
2. Tie three safety cables (not supplied) to the safety hooks on the camera and hang the camera from a secure point.



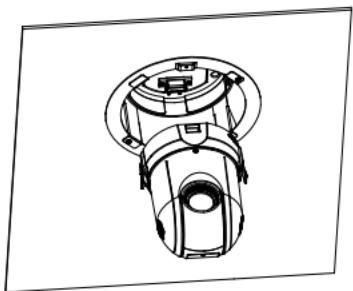
3. Unscrew the bubble from the camera and remove the protective tape from the PTZ module.
4. Press the two tabs on either side of the PTZ module and remove it from the camera housing.
5. Route the cables from the bracket and connect them to the PCB of the module through the cable entry hole on the top of the housing.  
**Note:** If alarm and audio input/output relays are to be used, also connect them to the PCB of the module.
6. Adjust the height of the two housing tabs by turning the screw on which they are attached. The distance ( $h$ ) of the tabs from the housing ring must be greater than the thickness of the ceiling.



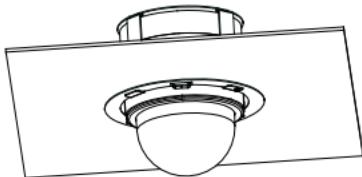
7. Make sure the housing tab is closed and then PUSH the housing into the pass-through hole. Hold the housing and fix it by screwing the housing tabs down to the mounting surface



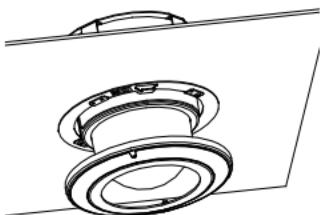
8. Insert the PTZ module into the housing:



9. Re-attach the bubble by screwing it to the housing.



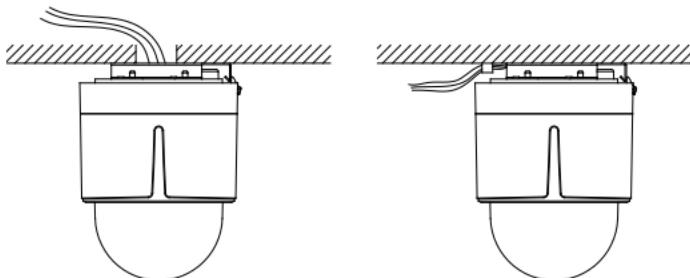
10. Install the trim ring. Align the trim ring to the housing, and insert the fix-pins to the holes. Then rotate the ring clockwise to secure.



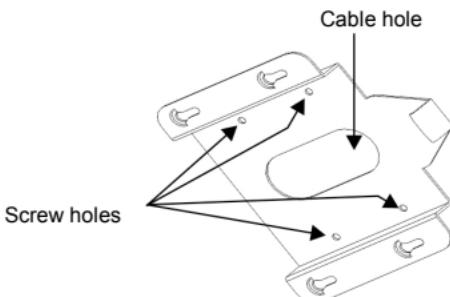
11. See "Access the camera over the internet" on page 21 to configure the camera over the internet. Refer to the Configuration Manual for detailed information.

## Surface-mount camera

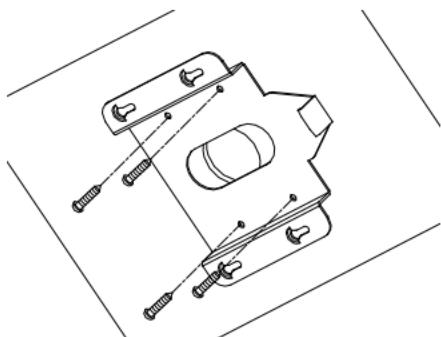
The cables of PTZ camera can be routed either from the top or the side of the housing. For the cables routed from the top of the housing, you must drill a cable hole in the ceiling.



1. Use the mounting base as a template to mark four screw holes onto the ceiling. If you route cables from the top of the housing, mark the cable hole on the ceiling and drill a hole.



2. Secure the mounting base to the ceiling with the set screws.

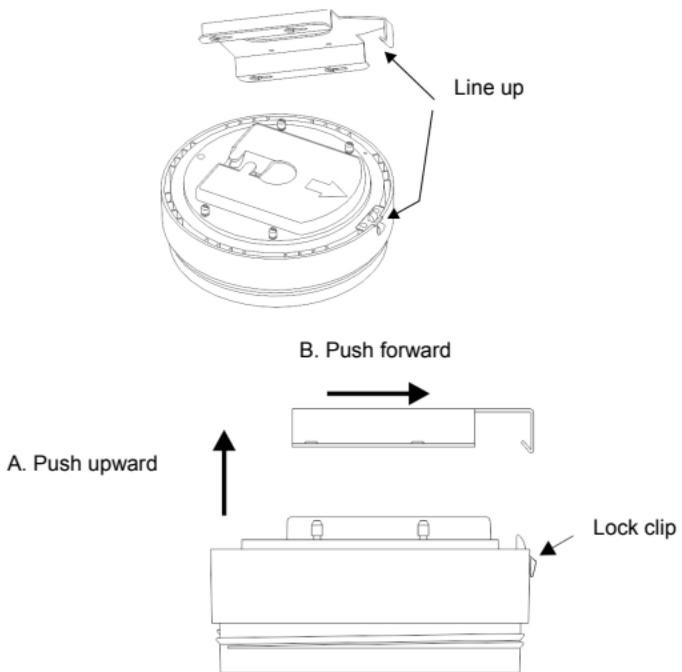


3. Unscrew the bubble from the camera and remove the protective tape from the PTZ module.
4. Press the two tabs on either side of the PTZ module and remove it from the camera housing.
5. Route the cables from the bracket and connect them to the PCB of the module through the cable entry hole on the top or side of the housing.

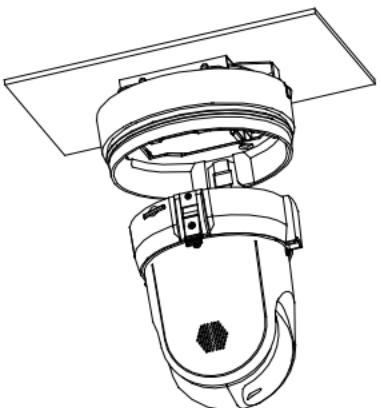
**Note:** If alarm and audio input/output relays are to be used, also connect them to the PCB of the module.

6. Install the housing onto the mounting base. Line up the direction of the arrow on the housing with the spring end of the mounting base. Push the housing upwards (A) and then forwards (B) in the direction of the arrow.

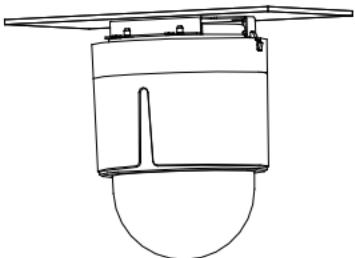
When the housing is placed in position, the spring will automatically snap into the lock clip firmly. Refer to the figures below.



7. Insert the PTZ module into the housing:



8. Re-attach the bubble by screwing it to the housing.



---

**Warning:** After installation, the PTZ module will perform a PTZ self-test and initializes with the power on. DO NOT touch and move the camera while it is self-testing and initializing.

---

9. See “Access the camera over the internet” on page 21 to configure the camera over the internet. Refer to the Configuration Manual for detailed information.

## **Using the camera with an Interlogix NVR or Hybrid DVR or another system**

Please refer to the NVR/DVR user manuals for instructions on connecting and operating the camera with these systems.

## **Using the camera with TruVision Navigator**

The camera can be connected to an Interlogix NVR, hybrid DVR, or directly to TruVision Navigator. Please refer to the user manual of TruVision Navigator and/or of the NVR or hybrid DVR for instructions.

## **Access the camera over the internet**

Use the web browser to access and control the camera over the internet.

**Note:** Any changes made to the camera's configuration only apply to this camera.

Change the administrator password once the set-up is complete. Only authorized users should be able to modify camera settings.

### **To access the camera online:**

1. In the web browser enter the camera's IP address (default is 192.168.1.70). The Login dialog box appears.
2. Enter your user name and password.

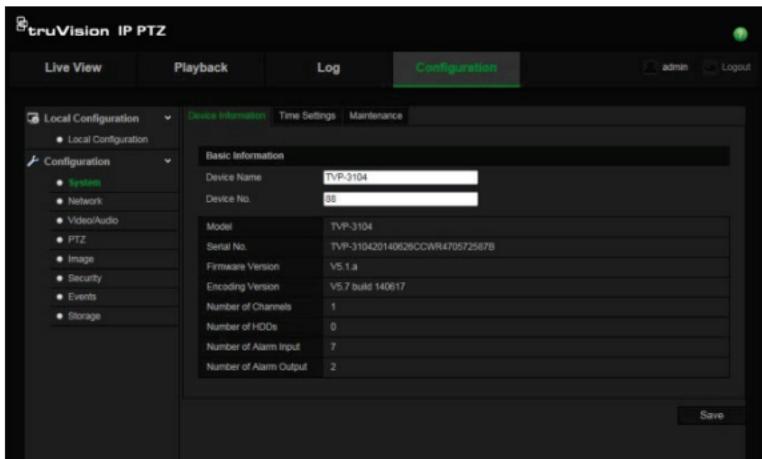
Default user name: admin

Default password: 1234

Click **Login**. The web browser screen appears in live mode.

3. Click the **Configuration** tab on the top of the screen and select the parameter to change.

**Figure 5: Example of a configuration window**



**Table 1: Overview of the Configuration panel**

Configuration folders	Description
System	Defines device basic information including SN and the current firmware version, time settings, and maintenance parameters.
Network	Defines the network parameters required to access the camera over the internet.
Video/Audio	Defines recording parameters.
PTZ	Defines the PTZ parameters.
Image	Defines the image parameters, OSD settings, overlay text, and privacy mask.
Security	Defines who can use the camera, their passwords and access privileges, RTSP authentication, IP address filter, and telnet access.
Events	Defines motion detection, tamper-proof, alarm input/output, exception, and snapshot configuration.
Storage	Defines recording schedule, storage management and NAS configuration.

# Specifications

## Electrical

Voltage input	24 VAC, PoE+ (IEEE 802.3at) TVP-1122/3122: 24 VAC, Hi-PoE
Power consumption	Wall-mount housing: 24 VAC: Max. 65 W PoE+: Max. 25 W Hi-PoE: 50 W max. Flush-mount housing: Max. 25 W Surface-mount housing: Max. 25 W

## Miscellaneous

Operating temperature	Wall-mount housing: PoE+: -30 to 65 °C (-22 to +149°F) Hi-PoE: -30 to +65°C (-22 to +149°F) 24 VAC: -40 to +65 °C (-40 to +149°F) Flush-mount housing: -10 to +50 °C (14 °F to 122 °F) Surface-mount housing: -10 to +50 °C (14 to 122 °F)
Dimensions	Wall-mount housing: Ø 220 × 266 mm Flush-mount housing: Ø 206 × 251 mm Surface-mount housing: Ø 180 × 240 mm TVP-1122/3122: Ø 245 × 371 mm
Weight	Wall-mount housing: 3.5 kg Flush-mount housing: 3 kg Surface-mount housing: 2.5 kg TVP-1122/3122: 6 kg
Environmental rating	Wall-mount housing: IP66 Flush-mount housing: IP54 Surface-mount housing: IP54

## Pin definitions

There are eight wires on a standard UTP/STP cable and each wire is color-coded. The following shows the pin allocation and color of straight and crossover cable connection:

**Figure 6: Straight-through cable**

1	White/Orange		White/Orange	1
2	Orange		Orange	2
3	White-Green		White-Green	3
4	Blue		Blue	4
5	White/Blue		White/Blue	5
6	Green		Green	6
7	White/Brown		White/Brown	7
8	Brown		Brown	8

**Figure 7: Cross-over cable**

1	White/Orange		White/Orange	1
2	Orange		Orange	2
3	White-Green		White-Green	3
4	Blue		Blue	4
5	White/Blue		White/Blue	5
6	Green		Green	6
7	White/Brown		White/Brown	7
8	Brown		Brown	8

Please make sure your connected cables have the same pin assignment and color as above before deploying the cables in your network.







