

INDUSTRIAL SECURITY CAMERA

Product instruction Manual

Class A equipment (business broadcasting and communication equipment)

This device is a business (class A) electromagnetic wave suitability device, and sellers or users are advised to pay attention to this point.

It is intended for use outside the home.



Through QR code,
you can find PDF file

Product User Manual

iVEX-PTZ,PTZR Series

Notice on Copyright and Trademark Usage

Products and company names mentioned in this manual are trademarks or registered trademarks belonging to the company.

WARRANTY

If the product is not normally installed due to a defect under normal use conditions,

The manufacturer will repair it free of charge through the place of purchase.

The warranty period is 1 years, and the following situations are excluded from the warranty.

- Abnormalities caused by product changes over time or natural wear and tear during use
 - Damage to fastening parts due to negligence when assembling the product
 - ※ The appearance and specifications of the product may be changed without prior notice to improve performance.
-

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PC System Recommended Specifications

- * CPU: Intel Core 2 Duo 2.4 GHz or higher (when using 1920x1080 30fps)
Intel Core i7 2.8 GHz or higher (when using 1920x1080 60fps)
- * Resolution: 1280x1024 or higher (32-bit color)
- * Memory: 2GB or more
- * Supported OS: Windows XP, VISTA, 7, 8, 10 / Mac OS 10.7 or later
- * Supported web browsers: Microsoft Internet Explorer (Ver. 8~11),
Microsoft Edge (Ver. 94 ~118) Latest 118
Mozilla Firefox (Ver. 9~19) Latest 85
Google Chrome (Ver. 15~15) Latest 88
Apple Safari (Ver. 6.0.2) Latest 14
 - Windows 8 is supported only in desktop mode.
 - Beta version or developer version other than the version released on the official site Not supported.
 - For IPv6 access, Windows 7 or later is recommended.
 - Safari Browser is supported only on Mac OS X.
- * Video memory: 256MB or more
 - The video memory card driver is not installed correctly, or the latest version is not available. If not, the video may not play normally.
 - When using two or more monitors, playback performance may decrease depending on system specifications.
may fall.






Component information

Before starting the installation, carefully check the following components enclosed in the product box to ensure that no parts are missing during installation.

Basic Components

Picture	Qty	Explanation	Picture	Qty	Explanation
	1	Product instruction Manual		1	L-Wrench set (M5,M4,M3, M2.5,M1.5)
	1	Power Supply		1	Wrench Bolt Set (M4*40)
	1	Output Cable		1	Hex Bolt Set (M8*15)
	1	Cable Gland		1	Copper tube Terminal (M6)
	1	Plug		1	Wrench Bolt (M4*8)

Optional components (purchased separately)

Picture	Qty	Explanation	Picture	Qty	Explanation
	1	Pedestal Mount Bracket		1	Wall Mount Bracket
	-	Mount Bracket Accessories		1	Waterproof Connector SET
	1	Extension Cable			

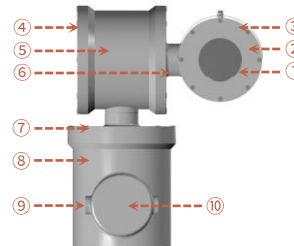
Component notes

- * Sun shields are shipped attached to IVEX-PTZ and PTZR Series products.
- * The power supply is provided at 24V for IVEX-PTZ and PTZR Series.
- * Multi-cable is not provided for models with built-in power supply.
- * Cable glands and plugs are not provided on some models or are replaced with sealing fittings can be.
- * When purchasing a pedestal mount or wall mount bracket, set anchors 4EA or 7EA are standard. Provided.

Product Classification and Part Names

Please be aware of the part names for each product as they are important for providing quick and accurate service for problems in each part.

IVEX-PTZ Series



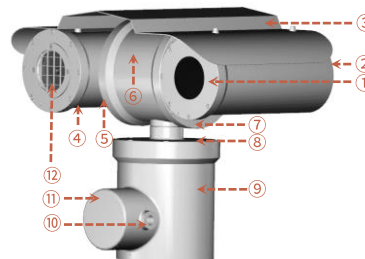
Series	Model	Details
iVEX-PTZ Series	IVEX-PTZ-41A	A type PAN BASE + GE Glass
	IVEX-PTZ-31A	A type PAN BASE + IP CAMERA

No	Details	No	Details
1	Camera Housing Cover	11	
2	Camera Housing Body	12	
3	Sun Shield	13	
4	Tilt Cover	14	
5	Tilt Body	15	
6	Tilt Flange	16	
7	Pan Flange	17	
8	Pan Body	18	
9	Cable Entry, NPT 1/4"	19	
10	Pan Service Cover	20	

Product Classification and Part Names

Please be aware of the part names for each product as they are important for providing quick and accurate service for problems in each part.

iVEX-PTZR Series



Series	Model	Details
iVEX-PTZR Series	IVEX-PTZR-41A	A type PAN BASE + GE Glass

No	Details	No	Details
1	Camera Housing Cover(R)	11	Pan Service Cover
2	Camera Housing Body	12	Protection Grid
3	Sun Shield	13	
4	Camera Housing Cover(L)	14	
5	Tilt Flange(L)	15	
6	Tilt Body	16	
7	Tilt Flange(R)	17	
8	Pan Flange	18	
9	Pan Body (A or B Type)	19	
10	Cable Entry, NPT 3/4"	20	

About the contents of the manual

Please read the product user manual carefully before installing and using this product, and keep the manual in a separate place for future reference.

Safety rules

1. Explosion risk

- This product complies with the relevant standard codes EN/IEC 60079-14, EN/IEC 60079-17, etc. Installation and maintenance must be performed by qualified personnel in accordance with national standards.
- Do not open the product with power supplied in an explosion-proof area.
- Product installation must be performed using appropriate tools.
- The manufacturer recommends the use of explosion-proof tools.
- Connection testing and maintenance work is recommended in non-hazardous areas.
- Grounding is essential to reduce the risk of ignition of products installed in explosive environments.
- The device must be connected to protective earth.
At this time, we recommend that you use an approved grounding cable.
- Before turning on the product in a potentially explosive location, check that all connections, such as cable glands, are properly closed. Please check.
- If the surface temperature of the device increases due to direct sunlight exposure, the surface temperature rating of the device is judged solely on the surrounding air temperature without any consideration.
- Make sure all devices are certified for the application and the environment in which it is installed.
- Any changes not approved by the manufacturer are not covered by warranty.

2. Electric shock hazard

- When installing or performing maintenance with the breaker ON, make sure the product is turned off.
- A power cut-off device must be included in the electrical installation and must be recognized very quickly and turned off when necessary. Need to check.
- An earth leakage circuit breaker of up to 16A is recommended for the electrical equipment to which the device is connected.
- The minimum gap between circuit breaker contacts must be 3 mm (0.1").
- Do not use worn or corroded cables.
- All cables must comply with IEC 60332-1-2, IEC 60332-1-3 and IEC/EN 60079-14.
- Check whether the characteristics of the power supply provided by the facility during installation and operation are consistent with the characteristics of the power supply required by the product. Check.
- During inspection, replace the SMPS with the same SMPS as the one originally provided to ensure protection against the risk of fire.
- This product is not suitable for use in locations where children may be present.

3. Work attention

- Verify that the installation method complies with explosion-proof regulations and specifications.
- After connection, it is recommended to test and install in a non-explosion-proof area before installing in the field.
- Check whether the terminal and cable connected to the SMPS are of appropriate size.
- Use an appropriate cable that can withstand the operating temperature.
- All unused cables must be electrically insulated.
- This product can only be installed in standard locations.
- Make sure the device is securely fixed before turning on the power.
- When power is supplied, this product performs several automatic calibration/checking tasks, so when power is supplied, keep it close to the device. Don't stand.
- Unauthorized modifications, use of non-original spare parts, unauthorized modification by the manufacturer. caused by installation, maintenance and repair by unskilled personnel.
We are not responsible for any damage to the device.
- For technical service, refer only to certified technicians.
- This product should only be serviced by appropriately trained personnel or under the supervision of manufacturer personnel.
- When repairing, use only genuine manufacturer parts.
- Strictly follow the maintenance instructions given in this manual.

4. Understanding the installation process

- Considering the considerable weight of the product, use an appropriate transport and handling system.
- Installers must comply with general accident prevention standards when handling the product.
- Before proceeding with installation, compare/check the components in the user manual to see if they match.
- Equipment installation in explosion-proof areas must be performed by professional technical personnel.
- The manufacturer assumes all responsibility for damage resulting from improper use of the device mentioned in this manual. I won't lose. We also reserve the right to change some parts without comment.
- It is the user's responsibility to select the surface on which the product will be fixed.
Fixtures are not provided. It is the installer's responsibility to select the appropriate fixture for his or her particular application.
Use installation methods and materials that can support at least four times the weight of the product.
- For all product maintenance, we recommend sending the product to the manufacturer for repair.
- This product is remotely controlled and may move during operation. This may prevent injury from a moving product. It must be installed so that no one is there.

Identification method

Product specification inspection

주의사항

경고 1. 통전중에는 개방하지 말 것
 경고 2. 조임기구는 STS Property Class A⁺-70이상 등급 사용할 것
 경고 3. 케이블인입부에 Exd IIC 또는 Ex tb IIIC이상의 방폭인증 실링핏팅류 사용할 것

KOREA GAS SAFETY CORPORATION

② 계조사 : (주) 인디스비전
 ⑤ 안전인증번호 : 20-GA2BO-0560X-0565X
 ⑥ 규격 : Ex d IIC T6 / Ex d A21 T85°C / IP67
 ⑦ AC110V~230V / DC12V~24V, Max 150W
 ④ 동작온도 : -40°C to +67°C
 ⑧ 시리얼번호 :

③ Model Name : IVEX-

INDUSVISION
MADE IN KOREA

[KOR Ver.]

WARNINGS

⚠ WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.
 ⚠ WARNING - TO REDUCE THE RISK OF IGNITION OF HAZARDOUS ATMOSPHERE, DISCONNECT THE EQUIPMENT FROM SUPPLY CIRCUIT BEFORE OPENING.
 ⚠ WARNING - KEEP ASSEMBLY TIGHTLY CLOSED WHEN OPERATING.
 ⚠ WARNING - TO REDUCE THE RISK OF IGNITION OF HAZARDOUS ATMOSPHERE ALL CONDUIT RINGS MUST HAVE A SEALING FITTING OR CABLE GRAND PLACED WITHIN 3/4" OF THE ENCLOSURE.

① IECEx KGS 14.0001x, Ex db IIC T6 Gb / Ex tb IIIC T85°C Db, IP67
 KRH 14 ATEX 1013X
 GYJ14.1418X

⑤ Ambient Temp : -40°C ≤ Ta ≤ +67°C
 Rated Voltage : AC110V~230V 50/60Hz / DC12V, DC24V
 Rated Power : MAX 150W

④ Serial No. :
 ③ Model Name : IVEX-

② 388, Songnae-daero, Bucheon-si, Gyeonggi-do, 14502
 Republic of Korea

INDUSVISION
MADE IN KOREA

[ENG Ver.]

Explosion Proof Certification Label Description

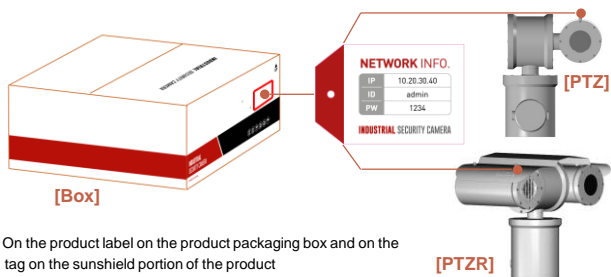
- ① Precautions
- ② Manufacturer and address
- ③ Model name
- ④ Serial number: 10 digits of product model code – 2 digits for production year and month – consists of manufacturing serial number
- ⑤ Operating temperature: Ambient temperature (-40°C ≤ Ta ≤ Tx°C, -40°C ≤ Ta ≤ Tx°C or Tx°C)
- ⑥ T Class (Tx or Tx... Tx)
- ⑦ IP protection level
- ⑧ Maximum surface temperature (Tx°C or Tx°C... Tx°C)
- ⑨ Safety certification number
- ⑩ Safety certification issuing authority

Certification IVEX-PTZ, PTZR Series certification numbers and cable gland information

Certification	IVEX-PTZ, PTZR Series certification numbers and cable gland information
IECEx	IECEx KGS 14.0001X
ATEX	KRH 14 ATEX 1013X
KCs	20-GA2BO-0560X-0565X
IK	IK10: 19-079699-01-1
Cable Gland	<ul style="list-style-type: none"> • Model No. : DONG A Bucheon Korea CE1180 (A2FC 20-C (M)NPT3/4" X (F)NPT3/4") • Entry Threads : NPT 3/4" • Protection Type : Ex db IIC Gb, Ex eb IIC Gb, Ex tb IIIC Db • Certificate No : Baseefa08 ATEX 0011X / IECEx BAS08.0003X • BS, IEC & CENELEC According to Zone1, Zone2, Zone21, Zone22, gas group IIA, IIB, IIC Suitable for use in • IP Rating : IP66, IP67 • Operating Temperature : -60°C ~ +100°C

Checklist before product installation

Check product operation information and appearance status



* On the product label on the product packaging box and on the tag on the sunshield portion of the product
After checking the information necessary for initial operation such as IP address, ID, password, etc. Keep it so you don't lose it.

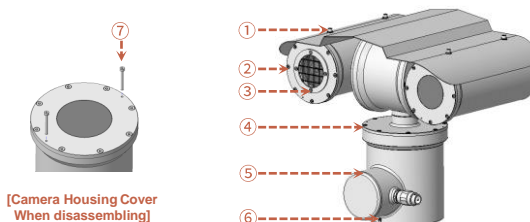
Check the packing box

- When delivering the product, check that the packaging is intact and has not been dropped or torn.
- In the case of returning a broken product, we recommend that you reuse the packaging box provided for transportation. Recommended.
- The box label attached to the product box contains the information shown in the picture above.
- Before discarding the box, back up the information entered on the label to prevent product operation problems. wish.

Safe Disposal of Packaging Materials

- Among packaging materials, PE foam, excluding paper, is subject to separate discharge. Therefore, please separate and dispose according to the separate collection method or regulations.

Check the specifications of the L wrench

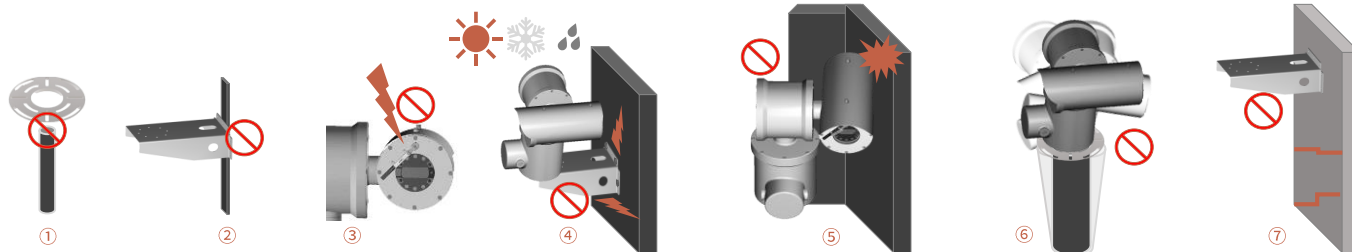


No	L wrench specification
1	M5 (Equipped with sun shield)
2	M4 (Camera housing cover)
3	M2.5 (Protection grid)
4	M5 (Flange and tilt cover, etc.)
5	M1.5 (Service Cover Wooden Bolt)
6	M4 Cross driver (Not provided)
7	M3 (M4*40 Housing cover opening bolt)
8	
9	
10	

Select product installation location

When selecting a location to install the product, be sure to install it in a place that does not have any inconsistencies as in the case below.

Things to consider when installing the product



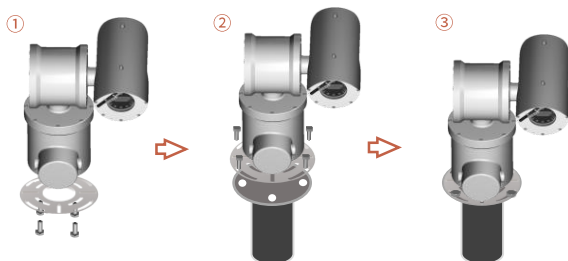
When selecting the initial location to install the product, please consider the following.

- ① Check whether the size of the 'pedestal mount bracket' provided by the manufacturer is appropriate for the size of the top of the pole.
- ② Check whether the size of the mounting parts such as the 'wall mount bracket' and H beam provided by the manufacturer are suitable for installation.
- ③ Make sure that the environment in which the product is installed is not an area where lightning frequently occurs, and if possible, install it in a place that is not affected by lightning.
- ④ If the environment where the product is installed is subject to external factors such as high temperature, high humidity, and low temperature due to direct sunlight, it is recommended to install the product to avoid these influences.
- ⑤ The environment in which the product is installed must be installed in a place where there is a sufficient turning radius for the product to move in PTZ motion.
- ⑥ If there is severe vibration in the environment where the product is installed, it may affect the video, so it is recommended to attach and install a device that can attenuate vibration, such as a separate damper.
- ⑦ If the environment in which the product is installed is poor and cannot support the high weight of the product (approximately 30 kg), it may pose a safety problem, so it is recommended to install it in another safe location.

Product installation and precautions

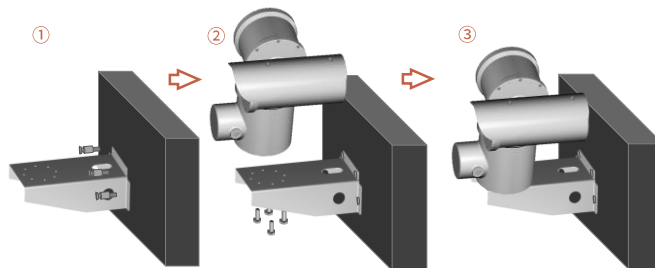
The manufacturer is not responsible for any problems caused by installing a bracket other than the genuine bracket provided by the manufacturer.

Pole installation using pedestal mount bracket



- Use the provided hex bolt set to fasten the bolts to the bolt holes between the pedestal mount and the product. At this time, check that there are no foreign substances in the threads or fastening holes of the product.
- Before tightening the bolt, apply locking compound (Loctite 263, medium-strength thread locking agent) to the bolt fastening hole. Apply liberally.
- The thread compound must harden for one hour, during which time the installation must be completed.
- Use the adapter external hole to secure the assembled device to the pole. Use screws that can withstand at least four times the weight of the device.
- When tightening the bolt, tighten the torque to 35Nm.

Wall installation using wall mount bracket

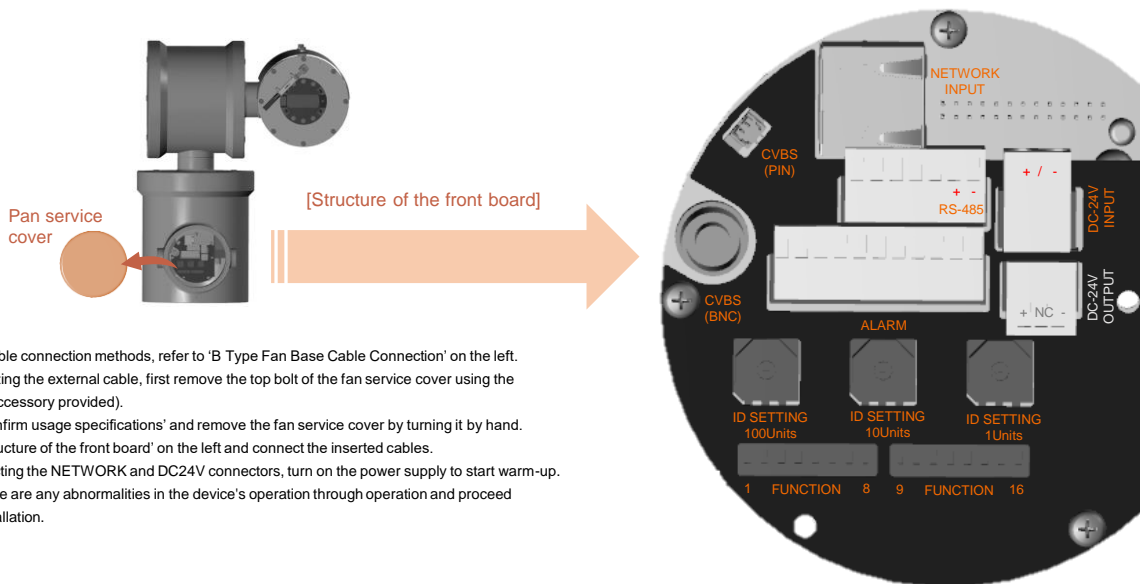


- The wall mount bracket can be fixed to a vertical wall. Secure the bracket to the wall with the supplied set anchors that can withstand at least 4 times the weight of the device.
- Then, secure the device to the bracket using the provided hex bolt set. At this time, check that there are no foreign substances in the threads or fastening holes of the product.
- Apply locking compound (Loctite 263) generously on the four bolts and then lock the bolts.
- The thread compound must harden for one hour, during which time the installation must be completed.
- When tightening the bolt, tighten the torque to 35Nm.

Product installation and precautions

Product defects due to connection errors between the power terminal and RS-485 terminal connector will be treated as customer error and will be repaired at a cost. IVEX-PTZ Series and IVEX-PTZR Series have a built-in hub, so they can operate normally when only one NETWORK cable is connected.

Connector connection of A Type Pan base



- For basic cable connection methods, refer to 'B Type Fan Base Cable Connection' on the left.
- Before inserting the external cable, first remove the top bolt of the fan service cover using the 'L wrench (accessory provided).
- Refer to 'Confirm usage specifications' and remove the fan service cover by turning it by hand.
- Refer to 'Structure of the front board' on the left and connect the inserted cables.
- After connecting the NETWORK and DC24V connectors, turn on the power supply to start warm-up. Check if there are any abnormalities in the device's operation through operation and proceed with the installation.

Tip

- The DC24V OUTPUT function is an option to re-supply DC24V to surrounding devices after installation of the product.

Product installation and precautions

Incorrect operation of options may cause malfunction or malfunction of the product.
 OPTION S/W functions may change depending on the product.

Front Panel Option setting table in A Type Panbase

FUNCTION S/W 1								FUNCTION MENU
PROTOCOL		BAUDRATE			TERMINATION	RS MODE	MODE	
1	2	3	4	5	6	7	8	
0	0							AUTO
0	1							PELCO D
1	0							PELCO P
1	1							NC
		0	0	0				2400
		0	0	1				4800
		0	1	0				9600
		0	1	1				19200
		1	0	0				57600
		1	0	1				115200
		1	1	0				NC
		1	1	1				NC
					0			OFF
					1			ON
						0		RS 485
						1		RS 422
							0	TOP
							1	BOTTOM

Option operation by PRESET number

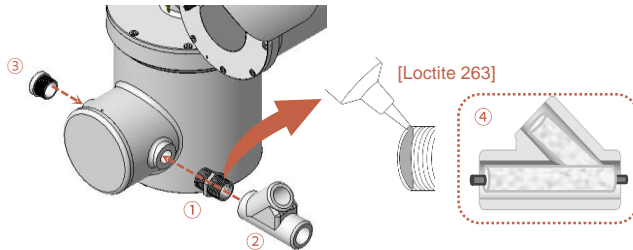
Operation function by preset number	BUILT-IN CAMERA No	EXTERIOR CAMERA No
IR-LED ON/OFF (Set Preset -> GO Preset Select)	#15	#15
Wiper ON/OFF (Set Preset -> GO Preset Select)	#16	#16
Run Home Position	#241	#241
Reboot	#242	#242
Factory Reset	#243	#243
Tour 1	#211	#211(*1)
Tour 2	#212	#212(*1)
Tour 3	#213	-
Tour 4	#214	
Tour 5	#215	
Tour 6	#216	
Tour 7	#217	
Tour 8	#218	

- The Group function uses presets #221 to #228 and does not work when an external camera is installed.
- The swing function uses presets #231 to #238 and applies to both internal and external cameras. However, the swing function from #231 to #234 supports forward operation, and the swing function from #235 to #238 supports reverse operation.
- The tour function in (*1) only applies when an external camera is installed, and #211 uses presets sequentially from #1 to #14 #212 operates Preset in the order #14 -> #1.

Product installation and precautions

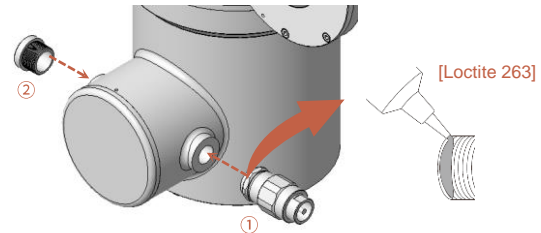
The manufacturer is not responsible for defective finishing of sealing fittings or explosion-proof cable glands (not filling compound, loosely tightening explosion-proof cable glands, etc.).

Equipped with explosion-proof sealing fittings



- In the case of sealing fittings, first fasten the NPT ¼ nipple of ①, then fasten the sealing fitting of ② on the other side of the nipple.
- Next, once cable insertion is complete, compound (piping sealant) is injected to finish the inside of the sealing fitting.
- At this time, generously apply locking compound (Loctite 263) to the fastening hole.
- Fasten the unused fastening part on the other side in the same way as the sealing fitting using the enclosed PLUG (③).
- When using a sealing fitting, the inside of the sealing fitting must be finished with a compound as shown in picture ④ in order to use it normally.

Equipped with explosion-proof cable gland



- For cable glands, fasten them to the NPT ¼ hole of the device.
- At this time, do not tighten too hard to insert the cable.
- Once cable insertion is complete, tighten it tightly using a monkey wrench.
- At this time, generously apply locking compound (Loctite 263) to the fastening hole.
- Fasten the unused fastener on the other side in the same manner as the cable gland fastener using the enclosed plug.

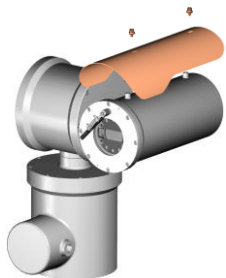
Tip

- Only one cable can be inserted into the cable gland, and the sealing fitting can be used by inserting multiple cables.

Product installation and precautions

The manufacturer is not responsible for damage to the product due to lightning, surge, etc. due to failure to ground the product.

Fastening of sunshield



- Secure the sun shield provided as an accessory to the housing using the wrench bolt (M6 SET) fastened to the top of the housing at the time of shipment using an L wrench (M5).
- Apply locking compound (Loctite 263) generously to the bolt fastening hole before tightening the bolt.
- The thread compound must harden for one hour, during which time the installation must be completed.
- When tightening the bolt, tighten the torque to 15Nm.

Ground installation

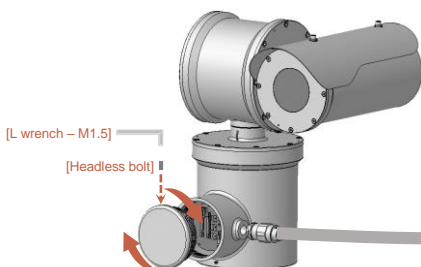


- Product grounding must be done using an external cable (12 AWG) with a cross-section of 3 mm².
- For the copper tube terminal to be used for power connection, such as grounding, use the copper tube terminal provided with the product and the M4*8 (wrench bolt) screw to secure it to the grounding hole with the provided M3 L wrench.
- A separate compressor is required to compress copper tube terminals. At this time, the press is not provided separately.

Installation completed and inspected

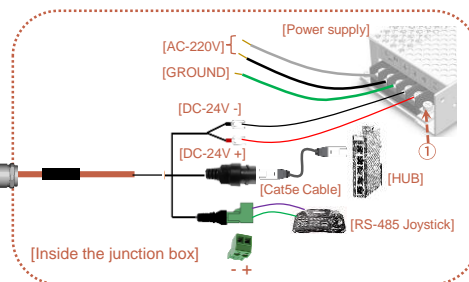
The manufacturer recommends that explosion-proof products be tested for normal operation in a safe location before installing them in the installation location.

Finalization of product installation



- Once the cable installation and explosion-proof flexible installation is complete, close the fan service cover by turning it by hand as shown in the picture.
- Before closing the fan service cover, make sure there is no foreign matter on the lid.
- To ensure smooth closing of the fan service cover, we recommend lubricating the threads with grease that complies with IEC/EN60079-14.
- Arrange the cables so they are not in the way when closing the threaded fan service cover in the junction box. - Turn the fan service cover firmly by hand until the O-ring is no longer visible.
- Use the L wrench (M1.5) included with the product to tighten the headless bolts at the top and bottom of the fan service cover. (At this time, the fan service cover must be kept locked as much as possible)

Internal wiring of explosion-proof junction box

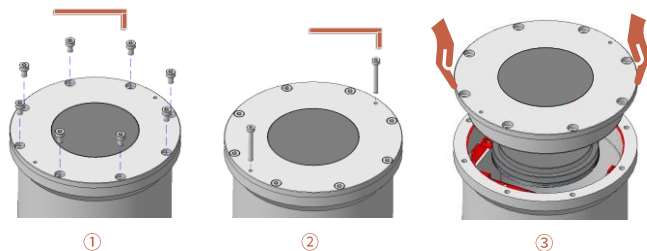


- After all installation is complete, install the power supply included with the product inside the explosion-proof junction box and install necessary devices such as network and other RS-485 controllers.
- Carefully connect the + and - terminals of the DC-24V power supply and turn on the power.
- Carefully check all connections to the product before turning on the power.
- When power is applied, the explosion-proof camera product switches to a warm-up state and automatically checks PAN/TILT and all camera-related matters.
- At this time, if there are no problems during inspection, it is connected to the NETWORK and can be used normally.
- If a problem occurs due to lack of power, turn the variable resistor in ① to increase the voltage to solve the problem caused by cable resistance.
- If an abnormality is discovered in the initial state, immediately turn off the power and contact the manufacturer.

Maintenance after product installation

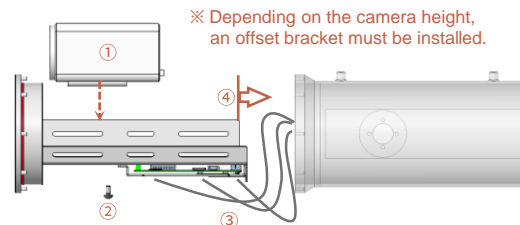
When replacing or maintaining the camera, be sure to move to a safe area, not an explosion-proof area.

Open Camera Housing Cover



- To install or replace the camera, remove 8 M5*10 wrench bolts from the camera housing cover using an L wrench (M4) and store them.
- To open the camera housing cover of the product, use the M4*40 wrench bolt provided as part of ② and fasten it to the 2-point M3 thread.
- Tighten the two M4*40 wrench bolts alternately with an L wrench (M3) little by little to gradually move the Camera Housing Cover away from the body.
- If the camera housing cover is separated from the body to a certain extent, pull it by hand as shown in ③ to completely separate the camera housing cover.

Replacement of external BOX camera



- As shown in ①, check whether the center of the camera matches the Camera Housing Cover and, if the height is low, adjust the height using the Offset Bracket and mount it on the IP bracket. If not, place the camera directly on the camera base bracket.
- As shown in ②, fasten the M6 bolt by aligning it with the mounting hole of the camera using a cross-head screwdriver.
- Connect the three harness cables to the motherboard as shown in ③. (Separation can be done in the reverse order of fastening.)
- As shown in ④, pay attention to the cables and insert them into the camera housing body carefully and assemble in the reverse order of disassembly.

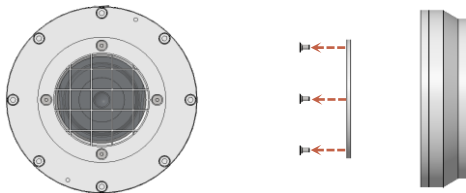
Tip

If the customer installs a separate external box camera, a new explosion-proof certification must be performed in accordance with explosion-proof regulations, and the manufacturer excludes the external box camera part, excluding the housing body and internal driving part, from service.

Maintenance after product installation

The manufacturer only guarantees the use of genuine parts guaranteed by the manufacturer for parts used during device maintenance.

Cleaning of GE Glass Protection Grid



- Through routine cleaning, the product must be managed periodically to prevent more than 5 mm of dust from accumulating on the surface.
(for static electricity prevention purpose)
- Tempered glass should be cleaned with mild soap and water diluted with water.
- Care must be taken when cleaning germanium glass to avoid scratching or damaging the carbon-coated surface.
- If the coating of germanium glass is damaged, the ultraviolet light projection of the surface may decrease.
- When cleaning germanium glass, unscrew the bolts of the germanium glass protector grid, clean with mild soapy water diluted with water, and then reassemble.
- Be sure to clean the surface of the device with a damp cloth

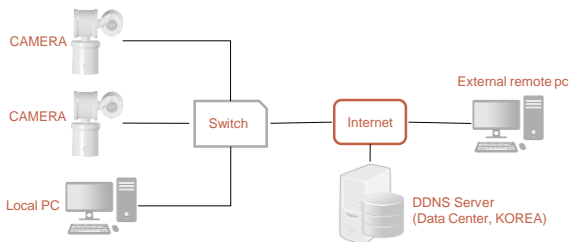
Tip

- The device must be disposed of appropriately in accordance with electronic waste guidelines and environmental regulations.

Network Connection and Setup

You can set the network environment of the camera according to the user's network connection configuration.

Installing the camera directly in a LAN environment

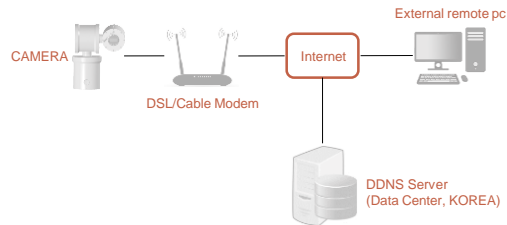


- Run the Internet browser of the local PC.
- Enter the IP address of the camera you want to access in the browser's address bar.
- From a remote PC on the external Internet in a LAN environment to a camera installed in a LAN environment. When connecting, if port forwarding is not done or if a firewall is installed, the connection is not possible. may not be. In this case, contact your network administrator.
- When the product is shipped, the IP address is a fixed IP as in 'Checking product operation information and appearance status'. It is set.

Tip

- If you lose the box or tag displaying the IP address, ID, and PW, you can contact us through the manufacturer's website. You can download the IP Search program.

Installing the camera directly in a LAN environment

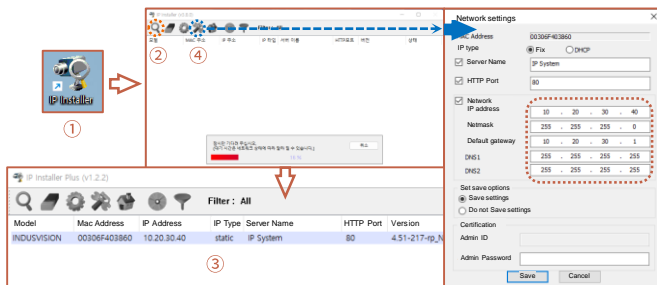


- Direct connection between user computer and network camera.
- Use the IP Search program to find the IP address of the camera from the user's computer to the Internet. Change it to an IP address that can be accessed through a browser.
- Connect to the web viewer using an internet browser.
- Move to the [Setup] page.
- Go to [Network] - [DDNS] setting page and set DDNS.
- [Basic] - Go to the [IP & Port] setting page and set the IP type to [DHCP].
- Disconnect the camera from the user's computer and connect it directly to the modem.
- Reboot the camera.

Network Connection and Setup

The IP address range of the user's computer and the IP address range of the camera must match for normal web viewer access.

Using the IP Search program

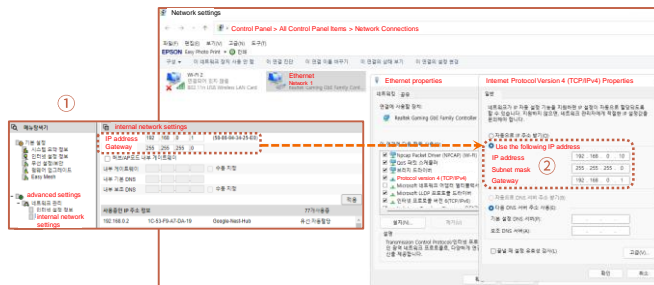


- Click the icon such as ① on the IP Search program downloaded to the user's computer Run.
- When the IP Search program is executed, click ② icon to start IP search.
If the IP address is normally searched as shown in ③, double-click the searched IP address to open the web viewer.
can connect. (default IP address: 10.20.30.40 / ID: root / PW: root)
- If you need to change the IP address, click the corresponding icon as ④ in the IP Search program. Click to change IP address.

Tip

- HTTP Port: HTTP used when accessing the camera using an Internet browser Port, the initial value is 80.
- RTSP Port: This is the port that controls real-time streaming, and the initial value is 554.

PC network settings depending on whether an IP sharer is used



- As in ①, connect to the internal network settings of the user's router.
(The menu name or access method may differ depending on the router manufacturer.)
- IP Address: Set according to the private IP range provided by the IP sharer.
Ex) 192.168.1.2~254, 192.168.0.2~254, 192.168.XXX.2~254
- Subnet Mask: If the <Subnet Mask> of the IP router is the <Subnet Mask> of the camera It's possible.
- Gateway: The IP router's <Local IP Address> becomes the camera's <Gateway> value.
- ② Check if the IP settings of the same band are set in the network settings of the user's computer. Check.

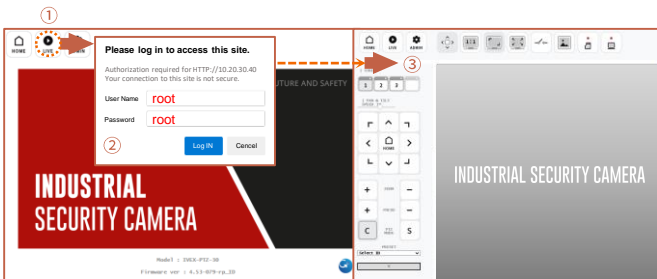
Tip

- If there are more than 2 cameras, camera 1 (192.168.0.3), camera 2 (192.168.0.4), etc. Set different IP addresses and use the same subnet mask and gateway.

Network Connection and Setup

Web viewer access can be checked in normal operation through Google Chrome and Microsoft Edge browsers.

Web viewer access

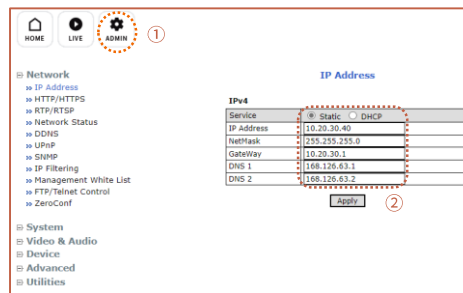


- Run a web browser such as Chrome or Edge on the user's computer.
 - Enter the IP address set on the camera into the web browser address bar.
 - If you connect to the camera normally as in ① and press the 'LIVE' button on the top left of the screen, the same as ②
- The ID/PW input window is executed, and input the initial ID/PW 'root'.
(For security, be sure to change the initial ID/PW after setting.)
- As shown in ③, you can check the OSD window for PTZ control along with the output of the live screen. there is.

Tip

When operating the web viewer in Internet Explorer 11, 'Active X' must be downloaded and executed.

Change IP Settings in Web Viewer



- There is a SETUP menu that displays the 'ADMIN' icon in ① on the live screen. Now.
- You cannot go back to the static IP and DHCP status for the camera IP address by clicking the 'IP Address' menu.
it's okay. Static IP allows you to change your IP address.
- When all changes are complete, click the 'Apply' button to save the settings.
- After 30 seconds, you can connect to the changed IP address in your web browser.

Tip

If the IP address you want to change is an IP address that is being used by another device in the same band You may not be able to access the web viewer due to an IP conflict.

Network Connection and Setup

When setting RTSP, you must first check if the '554 PORT' of the router is open.

RTSP settings

Service	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
RTSP Port	554 (Default:554, 554 ~ 65534)
Packet Size	1 (Default:1, 1 ~ 12)
Keep-Alive	<input checked="" type="radio"/> On <input type="radio"/> Off
RTP Auth Algorithm	<input checked="" type="radio"/> MD5 <input type="radio"/> SHA256
Camera 1	
Multicast Address	0.0.0.0 (Disable:0.0.0.0 ~ 225.0.0.0 ~ 239.255.255.255)
Multicast Port	0 (Disable:0, 2048 ~ 65534)
Camera 2	
Multicast Address	0.0.0.0 (Disable:0.0.0.0 ~ 239.255.255.255)
Multicast Port	0 (Disable:0, 2048 ~ 65534)
Camera 3	
Multicast Address	0.0.0.0 (Disable:0.0.0.0 ~ 239.255.255.255)
Multicast Port	0 (Disable:0, 2048 ~ 65534)

Apply

- **Service:** Set whether to use RTP/RTSP.
- **RTSP Port:** Sets the RTSP Port. The default value is 554.
- **Packet Size:** This is the menu to set the Packet Size to be transmitted via RTP/RTSP. If the value is low, compatibility with many S/Ws is maintained. It divides and transmits small amount of packets. The higher the value, the fewer packets are divided and transmitted. However, if the program does not support a high value, no video is displayed.
- **Keep-Alive:** Sends the current camera status through continuous UDP communication. Some S/W and equipment are not supported.
- **RTP Auth Algorithm:** Determines the RTP encryption authentication method.
- **MD5** is highly compatible with many S/W. If set to **SHA256**, stronger encryption is applied, but it cannot be played on S/W or devices that do not support SHA256, such as VLC.

Unicast Primary Stream (1번 Channel) : rtsp://camera IP/cam0_0

Unicast Secondary Stream (2번 Channel) : rtsp://camera IP/cam0_1

Unicast Tertiary Stream (3번 Channel) : rtsp://camera IP/cam0_2

Multicast Primary Stream (1번 Channel) : rtsp://camera IP/mcam0_0

Multicast Secondary Stream (2번 Channel) : rtsp://camera IP/mcam0_1

Multicast Tertiary Stream (3번 Channel) : rtsp://camera IP/mcam0_2

Firmware update method

HOME LIVE ADMIN

Network
System
Video & Audio
Device
Advanced
Utilities
Log
Reboot
Restore Default
Update

Update

Firmware Update [Start]

PTZ Device Driver Update [Start]

Sensor Device Driver Update [Start]

PTZ Firmware Update [Start]

System Information

Mac Address (E/N) 00:30:6F:40:3F:55

Firmware version 1.4.53-007up_ID

Please upload *_of_nTarga_*.bin file for Firmware.
For the system safety, "Do not close this window compulsory."

Select file [do] [cancel] [cancel]

Next Cancel & Report

Description
Processing: 0 %

- Press the 'ADMIN' icon at the top of the web viewer to enter the SETUP menu.
- Press the 'UPDATE' menu as in ① and click the 'Firmware Update -> Start' button at the top of the menu. Click.
- When a pop-up window like ② appears, click the 'Select File' button to specify the file to be upgraded. do.
- Click the 'NEXT' button at the bottom of the pop-up window in ② to proceed with the upgrade.

Tip

- If the firmware update is not completed normally, the product cannot be used.
- Please note that this problem must be returned to the manufacturer and repaired.

Installation inspection check sheet

1. When receiving the product, before on-site installation, please check the pre-checklist in the following order and only install on-site if there are no problems.
2. Please note that in some cases, service measures may be provided at a cost for problems that occur during on-site delivery without prior checklist inspection.

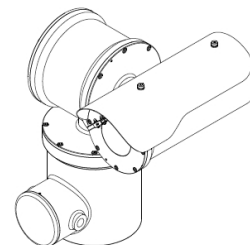
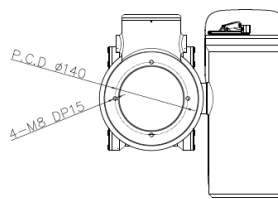
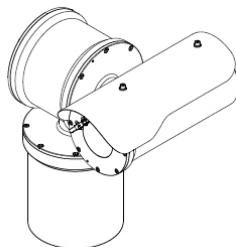
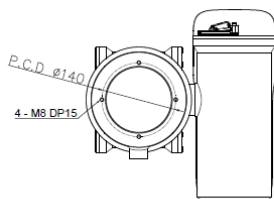
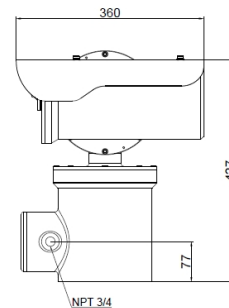
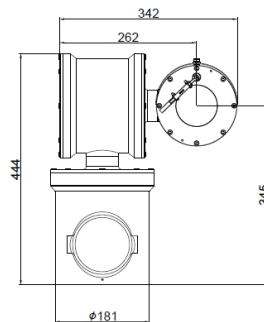
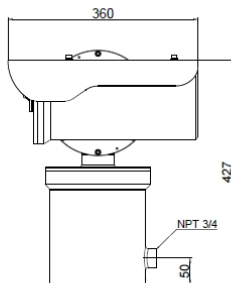
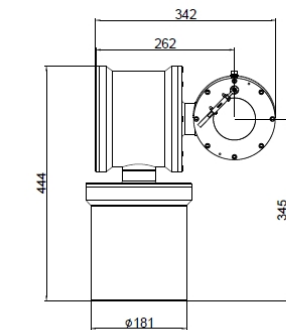
No	Checking list	Check
1	Please remove the IP address tag attached to the sunshield area of the product after installing and fixing the device.	<input type="checkbox"/>
2	Do not throw away at least one product box and PE foam for shipping defective products to the manufacturer.	<input type="checkbox"/>
3	Please remove the protective cap from the NPT cable input section after fixing the device.	<input type="checkbox"/>
4	If you turn the tilt part (up/down) more than 180 degrees from the front with excessive force, it may cause a malfunction.	<input type="checkbox"/>
5	Connect carefully according to the input specifications of a separate power supply or power supply (SMPS) supplied by the manufacturer. (DC24V / AC220V / AC110V, etc.)	<input type="checkbox"/>
6	Pay attention to the polarity (+, -) of the data line (RS-485) and connect it to the connection terminal correctly.	<input type="checkbox"/>
7	When turning on the main power, please check the warm-up (initial operation check) operation as follows. - Check PAN (left/right) control operation and TILT (up/down) control operation.	<input type="checkbox"/>
8	If applicable, connect the video cable (BNC terminal) correctly to the recorder or monitor to check for normal video output.	<input type="checkbox"/>
9	Correctly connect the CAT.5 cable (RJ-45 Jack) to the connection terminal and check that video and control operate normally under optimal network environment conditions.	<input type="checkbox"/>
10	Check/set whether the PTZ control protocol and control communication speed match the NVR or communication device you are using.	<input type="checkbox"/>
11	If applicable, check IR-LED and Wiper (left/right) operation.	<input type="checkbox"/>
12	Make a final check to see if there are any problems with the pan/tilt/zoom/video/control status.	<input type="checkbox"/>

Technical drawing – IVEX-PTZ Series

Please refer to the technical drawings and review the site situation before and after product installation.

IVEX-PTZ-30 Series

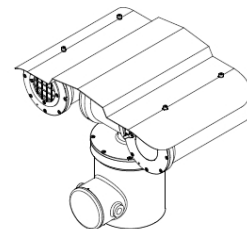
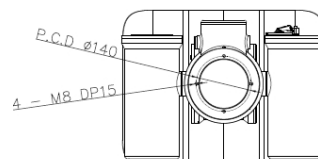
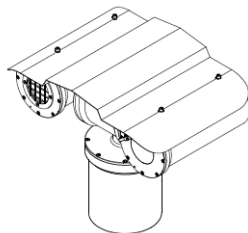
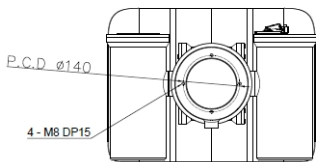
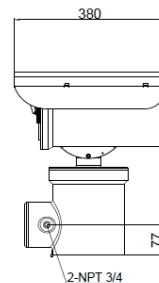
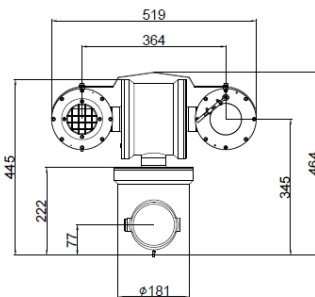
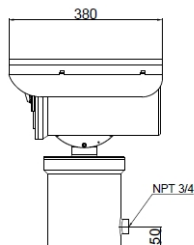
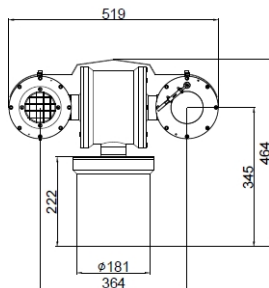
IVEX-PTZ-30A Series



Technical drawing – IVEX-PTZR Series

Please refer to the technical drawings and review the site situation before and after product installation.

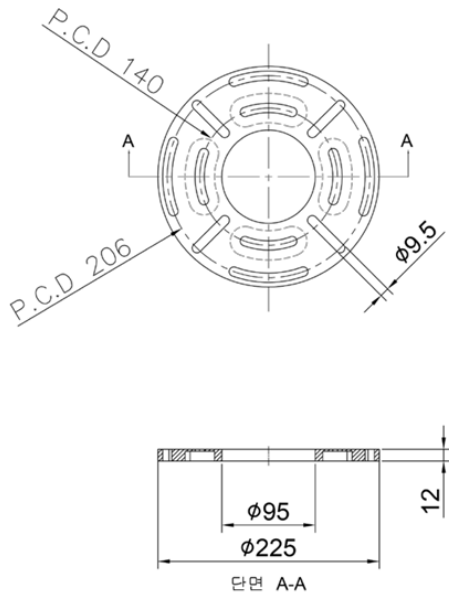
IVEX-PTZR-40 Series



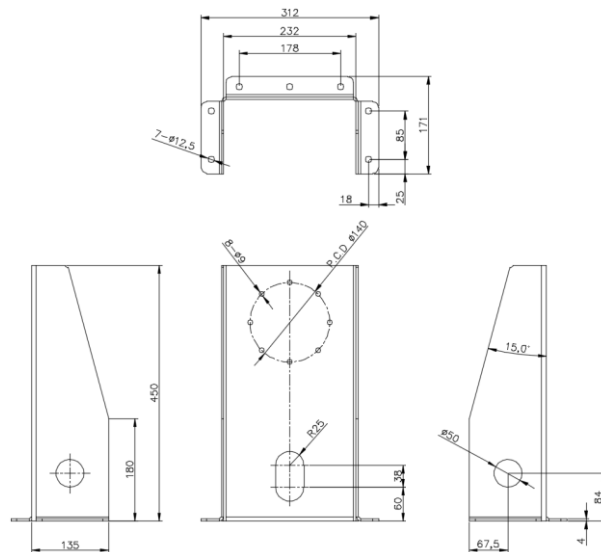
Technical drawing – IVEX-PTZR Series

Please refer to the technical drawings and review the site situation before and after product installation.

Pedestal Mount Bracket (IVEX-PTZ-PD)



Wall mount bracket (IVEX-PTZ-WB)



INDUSTRIAL SECURITY CAMERA