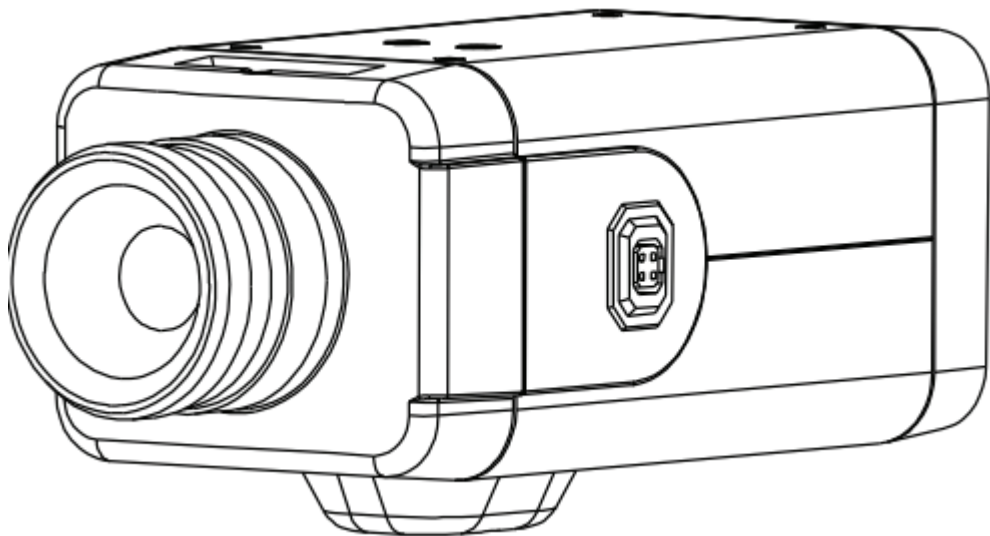


# Ikegami

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## Instruction Manual (Introduction Part)

### Network Camera **IPD-BX300**



**OUTDOOR USE WARNING**  
WARNING—TO PREVENT FIRE  
OR ELECTRIC SHOCK, DO NOT  
EXPOSE THIS APPLIANCE TO  
RAIN OR MOISTURE.

Thank you very much for choosing Ikegami network camera.

In order to leverage its capability for the maximum extent, please read the “Instruction Manual” thoroughly.

## **Safety Precautions (Be sure to follow all the contents.)**

### **To Use the Product Safely**

Before start using the product, thoroughly read this “To Use the Product Safely” and the “Instruction Manual” and use the product correctly. After reading the manuals, keep them at an easily accessible place.

### **Pictorial Indication**

In this manual and on the product, there are many pictorial indications used for achieving safe use of the product and prevention of damages to you, other people, and your assets.

The indications and meanings are as follows. Please thoroughly understand the contents of the safety part first, and then start reading the main part.

Please understand that some indications may not match to the actual product that you have purchased.



**Warning**

It indicates the content with possibilities of death or serious injury due to negligence to follow the instruction and mishandling.



**Caution**

It indicates the content with possibilities of personal injury or physical damage due to negligence to follow the instruction and mishandling.

### **Examples of Pictorial Indications**



The “△” symbol indicates the contents that require cautions (including danger and warning).

The detailed content of the caution is indicated in the triangle (caution of electric shock in case of the left drawing).



The “○” symbol indicates prohibited actions.

The detailed prohibition content is indicated in or near the circle (prohibition of disassembly in case of the left drawing).



The “●” symbol indicates the mandatory or instructed actions.

The detailed content of instruction is indicated in the black circle (pulling out the power plug from the outlet in case of the left drawing).

## Usage Note

## Warning



- **Do not remove the case and rear panel of the device!**

There are sections with high voltage inside, which causes electric shock. Consult your dealer or sales person for inspection, servicing, and repair of inside of the device.



- **Do not put a container filled with water on the device!**

If the water is poured inside of the device, fire or electric shock may be caused.



- **Do not place a small metal piece on the device!**

If the metal piece drops inside of the device, fire or electric shock may be caused.



- **Do not use the power supply voltage that is other than the specified voltage!**

Fire or electric shock may be caused.



- **Do not pour water on the device or do not wet the device!**

Fire or electric shock may be caused.

In particular, pay close attention when the device is operated in the rain, snow, at the seaside, and waterfront.



- **Do not insert a foreign object such as a metal piece or a combustible object from the aperture of the device! Do not drop such foreign object inside the device!**

Fire or electric shock may be caused.



- **Do not damage the power supply cord! Do not process the cord! Do not forcibly bend the cord! Do not twist the cord!**

**Do not pull the cord! Do not heat up the cord!**

The cord may get damaged, causing fire or electric shock.



- **Do not modify the device!**

Fire or electric shock may be caused.



- **Do not use the device at a place, where water exists, such as in the bathroom or the shower room!**

Fire or electric shock may be caused.



- **When the thunder starts rumbling, do not touch the coaxial connector/cable or the power supply plug!**

Electric shock may be caused.



- **Do not connect a device, of which consumption power (W) exceeds the specified value!**

Fire may be caused. The power (W) that the AC outlet of this device can supply is indicated near the AC outlet or in the Instruction manual.

## Installation

## Warning



- **Do not install the device on an unstable location!**  
The device may be dropped or fallen over, causing injury.



- **Do not place a heavy object on the power supply cord! Do not place this device on the power supply cord!**  
The cord may get damaged, causing fire or electric shock. If the cord is covered such as by a carpet, the cord may be hidden, and a heavy object may be placed on the cord.



- **Do not install the device at where water exists!**  
Fire or electric shock may be caused.



- **Do not connect any device that is other than the specified ones!**  
Fire or electric shock may be caused.



- **When fixing this device, request the work to a specialty constructor!**  
When fixing this device, it is necessary to take a specified procedure. Otherwise, the device may be dropped or fallen over, causing fire, electric shock, or injury. In particular, if the device is fixed on the wall or to the ceiling, be sure to request the work to a specialty constructor. In addition, consult your dealer or the sales person for the mounting cost.

## Measures Taken in Abnormal Conditions

## Warning



- **When there is smoke, strange smell, or unusual sound, turn off the power immediately and disconnect the power supply plug!**  
If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.  
Check that the smoke stops and request your dealer or the sales person for the repair. Never try to repair on your own. It is very dangerous.



- **When water comes inside of the device, turn off the power switch and disconnect the power supply plug!**  
If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.  
Contact your dealer or the sales person.



- **When any foreign object comes inside of the device, turn off the power switch and disconnect the power supply plug!**  
If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.  
Contact your dealer or the sales person.



- **When the device becomes faulty, turn off the power switch and disconnect the power supply plug!**  
If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.  
Request your dealer or the sales person for the repair

## Measures Taken in Abnormal Conditions



### Warning



- **When the device is dropped or when the case is damaged, turn off the power switch and disconnect the power supply plug!**

If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.

Contact your dealer or the sales person.



- **When the power supply cord is damaged (exposing core wire or broken wire), request for the replacement!**

If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.

Request your dealer or the sales person for the replacement.

## Usage Note



### Caution



- **Do not ride on the device!**

The device may fall over or get damaged, causing injury.



- **Do not place a heavy object on the device!**

The device may be unbalanced, and the object on the device may fall, causing injury.



- **When moving the device, be sure to turn off the power, disconnect the plug, and remove the connecting cable between equipment!**

The cord may get damaged, causing fire or electric shock.



- **If the device is not used for a long time, disconnect the power supply plug from the outlet for safety purpose!**

Fire may be caused.



- **Do not look at the sun or the lighting through the lens!**

The intense light on the eye may cause vision disorder.

## Installation



### Caution



- **Do not install the device in a location, where is highly humid or much dust exist.**

Fire or electric shock may be caused.



- **Do not install the device at a location, where oily smoke or humidity exists, such as on the kitchen counter or near the humidifier.**

Fire or electric shock may be caused.



- **Do not block the vent hole of this device!**

When the vent hole is blocked, the inside temperature increases, causing fire. Do not use the device in the following situations.

- Putting the device facing up, horizontally, or upside down. Installing the device to a narrow place, where is not well ventilated

- Putting the device on the carpet or on the mattress. Covering the device with the tablecloth.



- **Do not locate the power supply cord near the heat generating device!**

The cord coating may melt, causing fire or electric shock.



- **When disconnecting the power supply plug, do not pull out by holding the power supply cord!**

The cord may get damaged, causing fire or electric shock. Be sure to hold the plug when disconnecting.



- **Do not plug in or out the power supply cord with a wet hand!**

Electric shock may be caused.

## Batteries



### Caution



- **Do not use a battery other than the specified one!**

Due to rapturing or leakage from the battery, fire, injury, or taint of the surrounding place may be caused.



- **Do not use new batteries and old batteries together!**

Due to rapturing or leakage from the battery, fire, injury, or taint of the surrounding place may be caused.



- **Connect the batteries correctly with the positive and negative polarities in the correct directions!**

When the battery is connected incorrectly, due to rapturing or leakage from the battery, fire, injury, or taint of the surrounding place may be caused.



- **Do not disassemble or heat up the battery. Do not throw the battery in the fire or water!**

Due to short-circuiting or leakage from the battery, fire, injury, or taint of the surrounding place may be caused.

## Cleaning



### Caution



- **When cleaning the device, turn off the power switch and disconnect the power supply plug!**

Electric shock may be caused.



- **Request the cleaning of inside of the device to your dealer or the sales person for at least once a year!**

If the system is continuously used with the dust being accumulated inside, fire or breakage may be caused. In particular, it is more effective if the cleaning takes place before the rainy season with high humidity.

In addition, consult your dealer or the sales person for the cleaning cost.

**NOTE:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

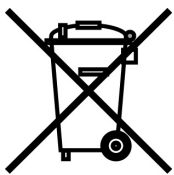
**CAUTION;**

ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PART RESPONSIBLE FOR COMPLIANCE COULD VOID THE USERS AUTHORITY TO OPERATE THE EQUIPMENT.

**Instructions for Disposal of Electrical and Electronic Equipment in Private Households**

**Disposal of used Electric and Electronic Equipment**

**(Applicable in the European Union and other European countries with waste recycling, disposal and collection methods)**



This symbol on the product, or in the related documents in the package, indicates that this product shall not be treated as normal household waste. Instead, it should be taken to a proper applicable collection point or depot for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent possible negative consequences for the environment and human health, which could otherwise be caused by inappropriate handling of this product. The correct recycling of materials will help to conserve natural resources.

For more detailed information about recycling of this product, please contact your local city authority, your household waste disposal service or the place where you purchased the product.

The product is intended to be supplied by a Listed Power Source marked Class 2 or Limited Power Source and rated output 48Vdc, 0.125A minimum.

The product shall be installed by a qualified service person and the installation shall conform to all local codes.

The product is to be connected to only PoE networks without routing to the outside plant.

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# 1 Introduction

## 1.1 Standard Configuration

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- Network box camera :1 set
- Instruction Manual – Introduction Part (this manual) :1 pc
- 8-pin terminal block for microphone/alarm :1 pc

## 1.2 About the Instruction Manual

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The instruction manual for this device consists of two parts: Introduction Part and Application Part. This instruction manual explains cautions for handling, installation, and connection.

For the detailed operations and settings of the device, please download the manual from the following URL.

<http://www.ikegami.co.jp/en/products/download/security.html>

## 1.3 Caution on Handling

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- Do not use this device at a place, where the device may get poured with water, or a humid place.
- Do not use the device at a hot or cold place, where the ambient temperature becomes lower than -10°C or higher than +50°C.  
Otherwise, the image quality and parts may get affected adversely or the damage to the device may be caused.
- When installing the device in the camera housing, pay close attention to the temperature inside of the housing. In this situation, the temperature inside of the housing is handled as the ambient temperature of the camera.
- Never open the camera case. There are precision components inside; therefore, malfunction or accident may be caused.
- When conducting the installation work or connecting, be sure to turn off the power.
- Do not drop or give a strong shock to the camera while transporting the camera.
- Do not touch the lens mount inside with a hand or a finger.
- Do not let the camera face the sun.
- Due to the characteristics of the imaging element, the screen sometimes becomes rough in high temperature. However, it is normal and not malfunction.
- To use the focus function of the lens in the best condition, adjust the flange focus (distance from the lens mounting surface to the imaging surface).
- Use a lens that corresponds to 3M pixel in order to leverage the performance of this device.

## 1.4 Disclaimer

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- (1) The purpose of this device is to take the video for monitoring. It is not for crime prevention.
- (2) We do not bear any responsibility over the following cases.
  - a. System failure, accident, and trouble caused by the connection with other maker's equipment
  - b. Accident and trouble caused by wrong use or negligence
  - c. Disassembly and repair that are not authorized by Ikegami
  - d. Abusive use of the monitored video, which was taken with this device, by the third party and damage and injury caused by such abusive use
  - e. Loss of the settings
  - f. Other injuries and damages caused in relation to this device directly or indirectly

## 1.5 Protection of Privacy Information

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Within video information acquired with this device, the ones that can specify an individual person are the **personal information** subject of "Act on the Protection of Personal Information." Handle such video information in accordance with the law.

\* Refer to the **cases corresponding to the personal information** specified in "guideline concerning the Act on Protection of Personal Information relating to economy and industry" from the Ministry of Economy, Trade and Industry.

## 1.6 Cautions of Network Connection

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This device is designed to be used by connecting to the network. To protect the system from the damages specific to the network connection, take the sufficient security measures under the responsibility of the customer.

The network-specific damages include damages by leakage/outflow of the information acquired by this device, unauthorized access, and the system stop. The measures include the followings; however, the customer needs to take other sufficient measures under the customer's responsibility.

- Do not place the device at a location, where the cable can be easily replaced.
- Secure the network safety (firewall, etc.).
- Periodically check for the virus on the connected PC.
- Limit the users on the connected PC (setting a password, etc.).
- Control as the authorized information do not leak.

## 1.7 Limiting the Applications of the Device

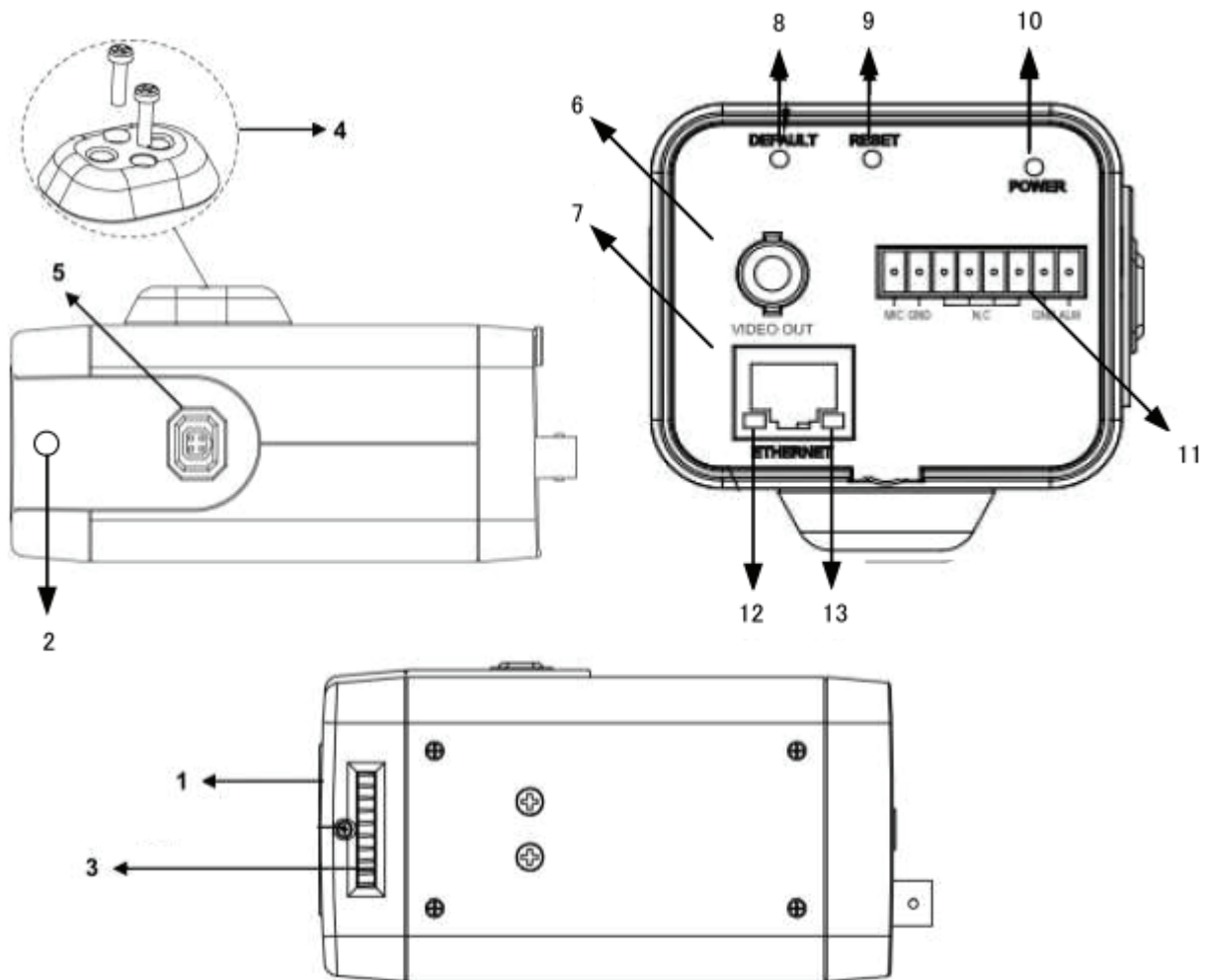
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The applications of this device are limited by "VC-1 and AVC/H.264 patent portfolio license relating to the personal and non-commercial applications."

Follow this regulation and use this device for the personal applications and applications other than the commercial uses.

For details, please refer to <http://www.mpegla.com>.

## 2 Names and Functions of Sections



- ① **Lens mount**  
Various CS mount lens can be used.
- ② **Flange focus fixing screw**  
Adjust the camera flange focus and then fix with these screws.
- ③ **Flange focus adjustment mechanism**  
Adjust the flange focus when the focus cannot be adjusted by using the focus ring at the lens side.
- ④ **Holder mounting screw**  
Screws to be used for mounting the camera to the holder. Mounting to the general camera tripod is also possible.
- ⑤ **Automatic iris connector**  
Connector for the automatic iris lens. Use the automatic iris lens of the DC iris method.
- ⑥ **Video output terminal**  
Output terminal of the video signal. Connect to the monitor for angle adjustment.
- ⑦ **Network output terminal**  
When connecting to other devices, use the cable of the category 5 or higher.  
It is compatible with PoE (IEEE 802.3af) Class 0.

- ⑧ **Default button**  
Pressing this button for approximately five seconds returns to the factory default values.
- ⑨ **Reset button**  
Press this button when restarting the camera.
- ⑩ **Power indicator**  
When the power is supplied to the camera, the red LED lights up.
- ⑪ **Block terminal block**  
It is connected when the microphone/alarm is input.
- ⑫ **Ethernet Link LED**  
It lights up in green when the connections with other devices are established.
- ⑬ **Ethernet Activity LED**  
It blinks in orange while the data is transmitted/received with other devices.

## 3 Connection

### 3.1 Camera Power Supply

---

This device can be connected to the network device that is compatible with the PoE standard (IEEE802.3af compatible). The power supply work for the camera is not necessary. Connect the PoE power supply system (HUB, etc.) and the Ethernet cable (category 5 or higher) to the network terminal.

This device does not have a power supply switch. Pull out and insert the network cable or turn on and off the power of the PoE power supply system.

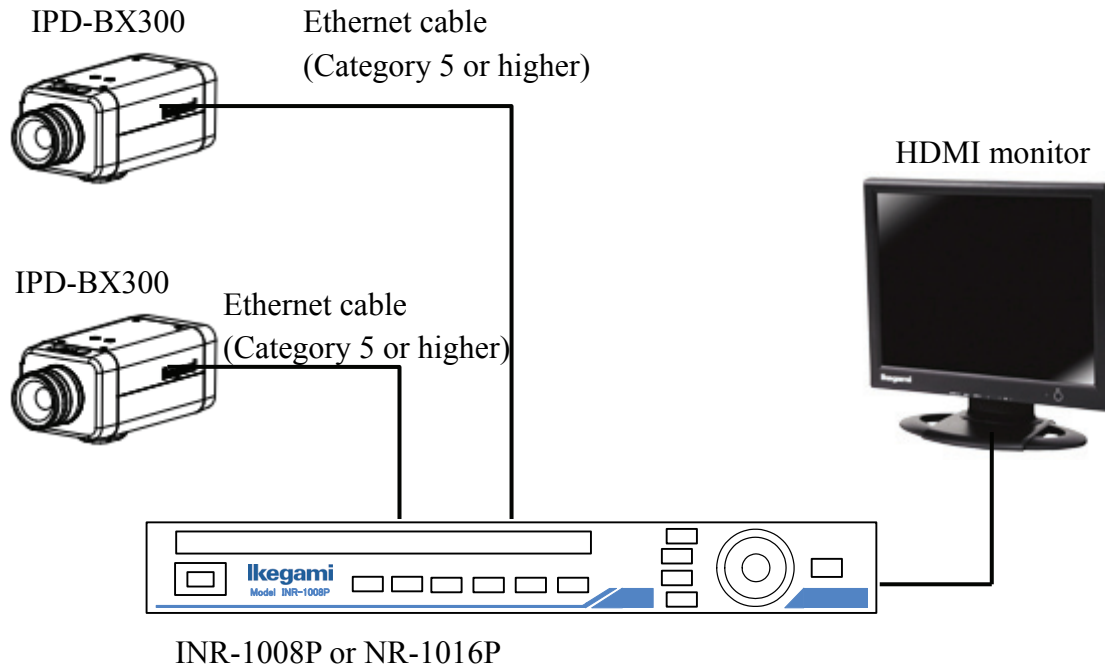
**[Important]**

- **The maximum length of the Ethernet cable is 100m.**
- **To reconnect the Ethernet cable, wait for a while.**  
**When the cable is connected immediately, there are cases that the power is not supplied from the PoE power supply system.**

## 3.2 Example of Connection

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Example of connection between this device and the network recorder (NVR)



## 3.3 IP Address

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When the IP camera is used, setting of the IP address is necessary.

In this device, the DHCP is set valid in the default setting. When the DHCP server is provided in the network, the IP address is automatically acquired. Therefore, it is not necessary to change the IP address of the camera.

When the DHCP server is not provided in the network, the default setting of the camera is as follows.

**IP Address** : 192.168.1.100  
**Subnet mask** : 255.255.255.0

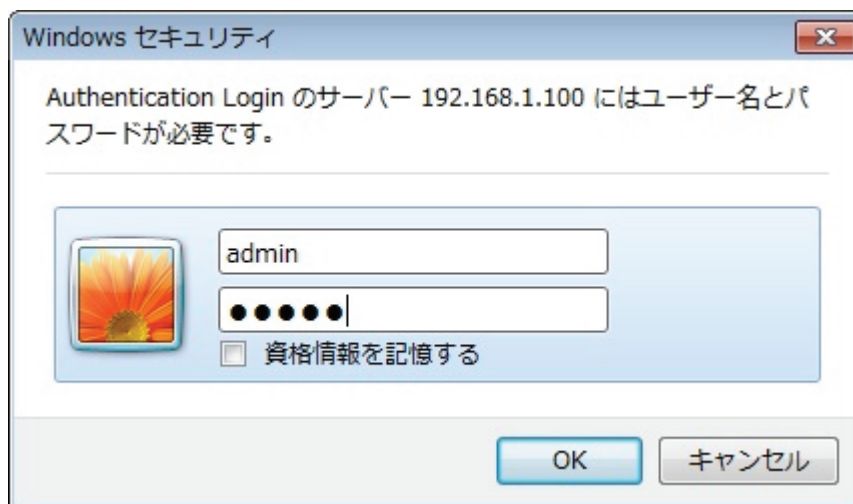
## 3.4 Logging In

1. Start up the browser (Internet Explorer, etc.) and in the address bar, enter the IP address of the network camera to change the setting.
2. Enter the user name and the password.

**User name** :admin

**Password** :admin

3. Click OK.



## 4 Warranty and After-sales Service

This product is delivered with the warranty certificate (in this manual). Please receive the warranty certificate at the time of purchase.

Fill in the specified items and check the written items. Then keep in a safe place.

- The warranty period is one year from the date of purchase. (However, it excludes consumables.) According to the warranty certificate, your dealer will repair the product. See the warranty certificate for the details.
- For repairs after the end of warranty period, consult your dealer or the sales person. If the functions can be kept working by being repaired, the product can be repaired with consideration upon a request from the customer.
- Before requesting the repair, please take some time and review the instruction manual. Check the contents and tell us of the model name, purchased date, and status of the trouble as detailed as possible.
- For other details regarding the after-sale service, consult your dealer or the sales person.

\* Be sure to conduct the maintenance inspections always at early timings.

# 5 Specifications/Exterior

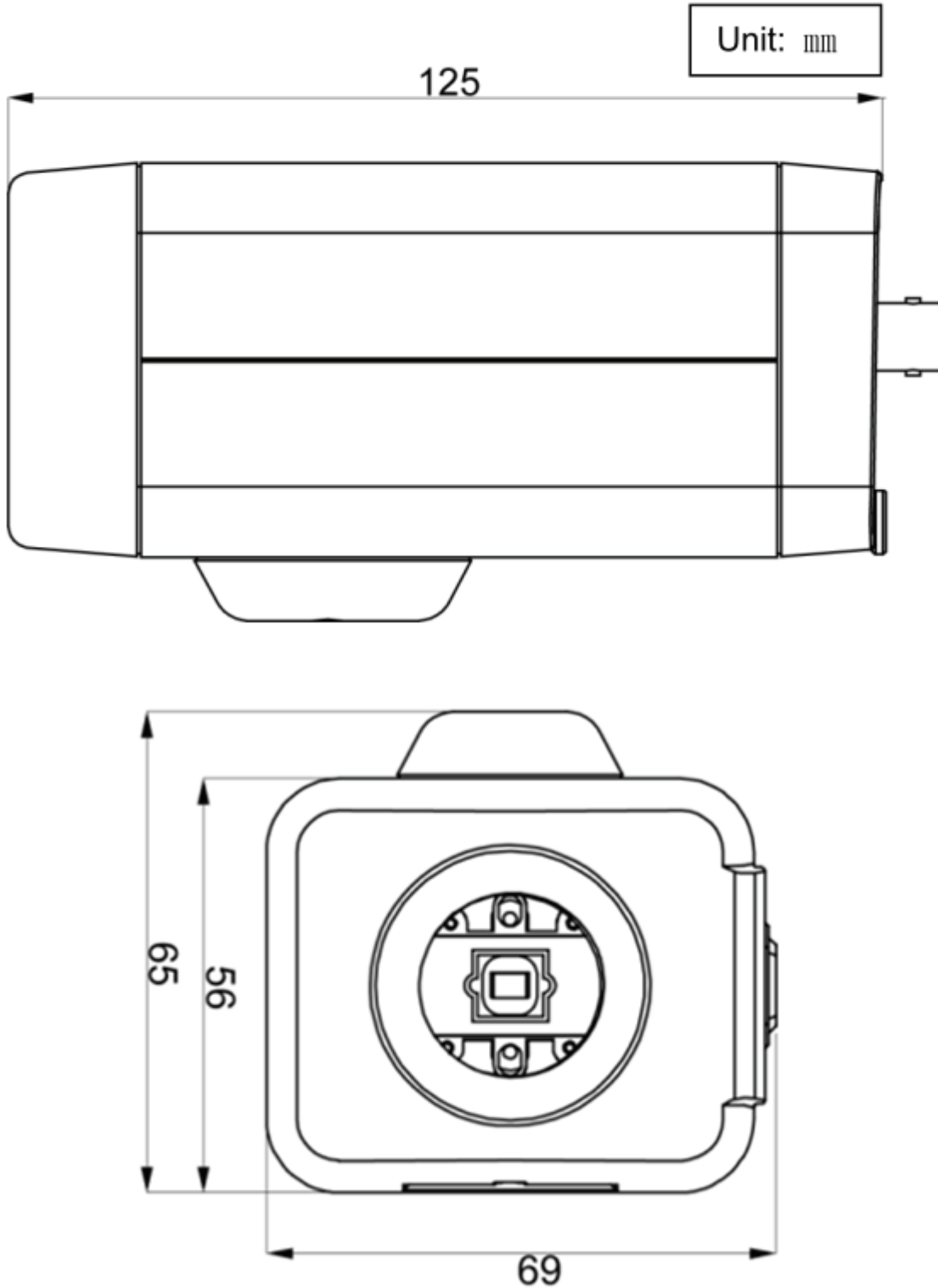
## 5.1 Specifications

(1) Imaging element	1/3 type CMOS sensor
(2) Scanning method	Progressive scan
(3) Synchronizing method	Internal synchronization: Crystal-lock
(4) Analog video output	VBS 1.0 Vp-p/75Ω (for angle adjustment)
(5) S/N ratio	50 dB (p-p/rms) or higher
(6) Lowest object illuminance	(Color) 0.6Lx/F1.2 (Electron sensitivity OFF, VBS output 50%) (Black and white) 0.07Lx/F1.2 (Electron sensitivity OFF, VBS output 25%)
(7) WDR function	Yes
(8) AGC	Yes
(9) Electron sensitivity	Yes, Switching between ON/OFF
(10) Switching between day and night	Corresponding to True Day/Night, Switching between auto/manual
(11) Automatic iris function	Corresponding to DC iris
(12) DETAIL correction	Yes
(13) White balance	ATW/Manual selection
(14) Privacy mask	Yes (setting possible up to the max. of 4 sections)
(15) Noise reduction	Yes (level adjustment possible)
(16) Camera ID	Yes
(17) Video setting	Two-pattern setting possible
- Compression method	H.264 or MJPEG
- Image size	1920 x 1080/1280 x 960/1280 x 720/640 x 480/640 x 360/320 x 240/320 x 176
- Frame rate	Max. 30 fps
- Bit rate (H.264)	256 Kbps to 12 Mbps (Only H.264 is valid)
- Image setting (MJPEG)	Yes (Only MJPEG is valid)
- Transmission mode	H.264: CBR / MJPEG: VBR
(18) Motion detection	Yes (mask setting possible)
(19) Audio function	Yes
- Input level	-20 dB
- Input impedance	2 kΩ
(20) Network	Ethernet 10Base-T/100Base-TX
(21) Protocol	TCP, UDP, RTP/RTCP/RTSP, HTTP, HTTPS, FTP, NTP, ICMP, IGMP, IPv4, ARP, DHCP, DNS
(22) Power supply	PoE (IEEE 802.3af) CLASS 2
(23) Power consumption	Approx. 4.5W
(24) Operating ambient temperature/humidity	Within -10 to + 50°C/30 to 90 %RH (However, there is no condensation.)
(25) Exterior dimension (W x H x D)	69 x 56 x 125 mm (however, projection section is not included.)
(26) Mass	Approx. 390g

- |                             |             |                             |
|-----------------------------|-------------|-----------------------------|
| (27) Input/output connector | - ETHERNET  | :RJ-45 (Auto-MDI/MDIX)      |
|                             | - VIDEO OUT | :BNC (for angle adjustment) |
|                             | - MIC/ALARM | :8P block terminal block    |

## 5.2 Exterior

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# Ikegami

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