ONV-IoT9000 IoT Intelligent Box User Guide

Packing List

◆   IoT Intelligent box (1 set)

◆   Installation accessories (1 set)

◆   User guide (1 PC)

◆   Box door key

◆   Warranty card

First, Safety Precautions

- To ensure the safety of people and equipment, when installing, operating, and maintaining the equipment, follow the signs on the equipment and the safety precautions described in the manual. "Warnings" and "notes" in this manual do not represent all safety precautions that should be followed, and are only supplementary to safety precautions.

- When carrying out various operations of our equipment, we must strictly observe the relevant equipment precautions and special safety instructions provided by ONV company. The "safety warnings" listed in the manual only reflect the requirements of ONV company. The safety requirements have not been reflected, and ONV company will not bear any responsibility for the loss caused by the violation of the general safety operation requirements or the violation of the design production and use equipment safety standards.

⚠️ **Note**

This IoT intelligent box is a Class B product. In the living environment, this product may cause radio interference. In this case, user intervention is required to take practical measures. Class B products are products that have passed EMC class B certification.

During transportation, handling, and installation, avoid collisions between the device and objects such as doors, walls, and shelves.

● Description

The figures in this document are for reference only. The appearance of the device is subject to actual delivery.

Second, the installation environment requirements

● The IoT intelligent box support outdoor pole mounting.

- The temperature and humidity of the installation site must be kept within the temperature and humidity range in which the IoT intelligent box can work normally. For the normal temperature range and relative humidity range of the IoT intelligent box, refer to the IoT intelligent box product data sheet.

- The grounding cable of the IoT intelligent box is an important step in the installation process. The correct connection of the grounding cable of the IoT intelligent box is an important guarantee for lightning protection, interference prevention, and anti-static damage of the IoT intelligent box.
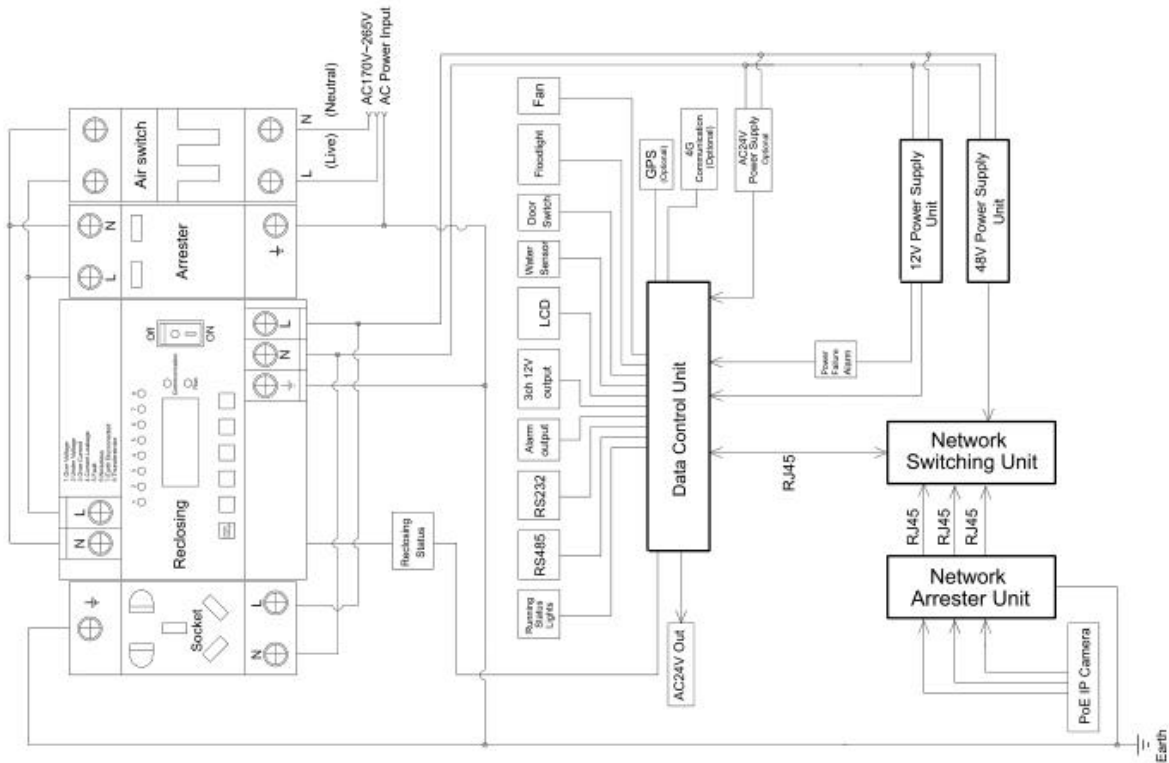
Third, lightning protection requirements

- Do not use outdoor overhead wiring. The equipment may be damaged by lightning. Please use buried or steel pipe wiring.

- Before turning on the power, the machine must be grounded to ensure that the grounding resistance of the installation environment does not exceed 10Ω, otherwise the equipment or the docking equipment

may be damaged.

Fourth, pre-commissioning

- The ONV IoT intelligent box is modular in design, which can be flexibly configured according to the actual needs of the project, and the optimal matching function module is selected by adding/reducing. If the intelligent box needs to be commissioned, it is recommended to complete it before the smart box is installed on the pole.

- The following is a diagram of the internal wiring of the intelligent box for participation.

- ONV IoT intelligent box equipment support managed PoE switch module for network transmission. You can pre-configure the PoE switch network management function according to the following operations. (This item is ignored for intelligent boxes without PoE switch)

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4.1 Log in to the device for the first time through the web system

Login notice

■ If the web page displays abnormally, it may be because the browser version is too low. Please upgrade

your browser. Google Chrome is recommended first. Refer to the "Web Configuration Guide" for

detailed requirements.

Login steps

1. Power on the intelligent box and confirm that the network module is working normally.

2. Use a network cable to connect the computer to any Ethernet port on the Ethernet switch.

3. Configure the computer's IP address to be on the same network segment as the default IP address of the

Ethernet switch.

4. Open a browser on your computer, enter 192.168.2.1 in the address bar, and press Enter to display the

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web network management login interface. Enter the default user name "admin"and password"system". click"OK" or press "Enter" to enter the web network management configuration interface.

5. Configure the Ethernet switch. The web network management configuration interface provides basic and optional configurations of the device. After the user has configured the basic configuration, he can log in to the device through the web network management. After the optional configuration is configured, he can log in to the device through Telnet. Only the content of basic configuration is introduced here. For the content of optional configuration and more product information, please refer to the configuration guide of the corresponding product.

4.2 Log in to the device for the first time through the console port

Login notice

■ The console cable is shipped with the device. Do not connect cables from other manufacturers to avoid

damage to the product.

■ Please prepare third-party terminal emulation software (Secure CRT software). For the usage method, please refer to the software's user guide or online help.

Login steps

1. Power on the intelligent box and confirm that the working indicator of the Ethernet switch module is on normally.

2. Connect a computer (PC) to the console port of the Ethernet switch using a console cable.

3. Open the terminal emulation software on the computer, create a new connection, set the connection port and communication parameters. The communication parameter configuration of the computer terminal must be consistent with the default configuration of the console port of the Ethernet switch.

● Transmission rate: 115200

- Data bits: 8

- Calibration method: None

- Stop bit: 1

- Flow control mode: None

4. Press"Enter"until the following terminal appears on the emulation terminal, prompting the user to enter a username and password. When logging in for the first time, the default user name is"admin"and the password is"system".

- Passwords entered interactively are not displayed on the terminal screen. you can now type commands to configure the device. For more information, refer to the configuration guide for the corresponding product.

Fifth, install intelligent box

Installation instructions

- Hold pole installation only supports vertical round pole installation.

- When installing the machine, you need to use the matching sheet metal mounting parts and screws.

- Wear protective gloves when installing.

- It is forbidden to install the intelligent box under power.

- The exterior paint of the intelligent box should be kept intact. If the paint is lost, the paint needs to be replenished immediately to prevent corrosion.
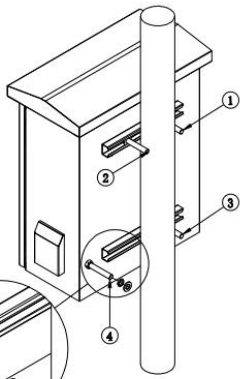
Installation preparation tool

- Labor protection gloves

- wrench

- Ladder

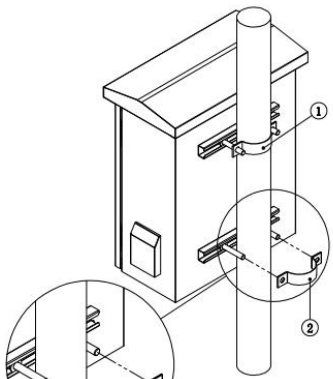■ Cross screwdriver and flat screwdriver

Installation steps

Step one
(positioning and mounting screw bolt)

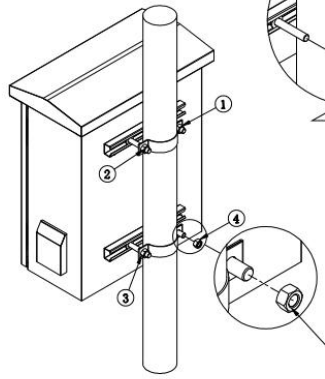M12 screw * xL
M12 spring pad
M12 flat pad

Step two
(positioning and Installing the clamp)

Clamp
(Standard equipped with clamp rod diameter: φ80mm, φ70mm, φ60mm)
(Standard equipped with clamp rod diameter: customizable rod diameter)

M12 nut

Step three
(tighten the nut to complete the installation)

Sixth, connect the intelligent box

- Route the cables connected to the intelligent box through the pole.

- The earth wire need to be prepared by the user.

⚠️

- It is forbidden to install and remove the intelligent box and power cord with power on to avoid personal injury.

- The 110 / 220VAC output power supply inside the intelligent box contain air switch, voltage stabilization, lightning protection, and auto-reclosing. Please confirm the position of the air switch before connecting.

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Do not connect with power.

- Pay attention to the +/- or L / N mark when connecting the power cord to the terminal. Connect the live wire of the AC power cord to L and the neutral wire to N. Install the PE wire to the PE ground terminal of the maintenance compartment.

- All power cables must not have metal parts exposed in the air.

- The maximum fiber length supported by the disk box: bare fiber single fiber support a maximum of 20m, pigtail single fiber supports a maximum of 1m, if two pc fibers are used, the maximum length supported by a single fiber will be reduced by half.

Seventh, check after installation

1. Check if the sheet metal installation (mounting ears) is secure and all screws are tightened.

2. Check that all cables are connected with the correct polarity and that the connections are secure and

reliable to ensure that there are no short circuits.

3. Check whether there are screw holes without screws, whether the screws of each module are firm, and whether the door lock is intact.

4. Power on and check, check whether all the functions of the the IoT intelligent box are normal through the display of the data acquisition control unit (each time the button is pressed different information is displayed).

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