Moving Ring Distribution Controller Operation Guide

Please read this manual:

It provides important installation, operation, and maintenance wizards to give your device maximum performance and extended device life.

Please keep this manual:

It contains important guidance on the safe use of moving rings and access to services.

catalogue

1. Overview

1.1 Product Introduction

The dynamic ring distribution controller collects infrastructure data through network SNMP, RS 485, etc. The default IP address of the distribution controller is 192.168.0.1 00, the factory setting is 192.168.2.191, and the account password is admin. The distribution controller has built-in network services that can be accessed directly through the browser login.

This product is always designed around the concept of high reliability power environment detection, and it is a system specially designed for monitoring and managing the environmental parameters and equipment status in the data center or computer room. It can be applied to a variety of different environmental monitoring and management scenarios, to meet the personalized needs of users.

1.2 Main characteristics of the products

1.2.1 Highly intelligent

The moving ring distribution controller system of VK adopts advanced intelligent technology, which can realize the real-time detection and control of the dry contact state and sensor state of the data center equipment, so that the managers can handle the abnormal state of the data center in time and ensure the normal operation of the data center.

1. 2.2 Real-time monitoring and early warning

The moving ring distribution controller system has real-time monitoring function, and can timely find equipment failure, abnormal temperature, energy waste and other problems, and timely issue early warning notice. This can help the data center operations and maintenance personnel to respond quickly and solve problems, and improve the stability and reliability of the overall operation.

1.2. 3 Precise energy management

VK moving ring distribution controller system can accurately monitor the energy consumption of data centers, including power, cooling and other aspects. Through real-time analysis and optimization of energy data, energy

conservation suggestions and strategies can be provided to help data centers reduce operating costs and improve energy efficiency.

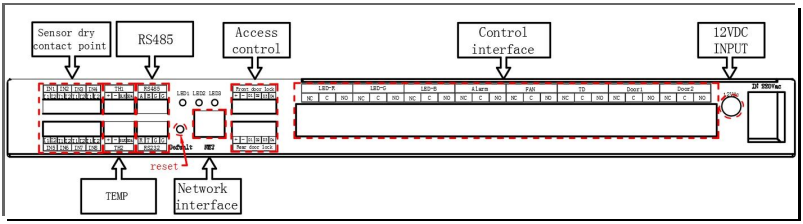
1.2. 4 Expansibility

VK moving ring distribution controller system has good scalability, which can be flexibly increased and adjusted with the expansion of data center scale. Users can expand and upgrade the system according to their own needs to adapt to the changing business needs and data center development.

1.2.5 Data security and privacy protection

Data security and privacy protection: VK dynamic ring system attaches great importance to data security and privacy protection, and adopts strict data encryption, authority management and access control measures. User data will be protected from access or compromised by unauthorized personnel.

1.3 Equipment description



name	meaning	name	meaning
IN	Dry contact input interface	RS485/232	Serial port communication interface
LOCK	Access control interface	N ET	network interface
TH	Temperature and humidity sensor interface	terminal board	Relay interface

* 12V power port: Dynamic ring distribution controller supports DC 12V power input.

* IN 1-5: Support 5 ordinary dry contact input detection. The dry contact name and the trigger mode can be customized. Can set the normal open or normal closed trigger alarm.

* IN 6-8: IN 6 corresponds to the smoke sensor dry contact, IN 7 and IN 8 correspond to the front and rear door dry contact, can set often open or close trigger alarm.

* Relay interface: 8-way relay dry contact output, support normally open or normally closed output. LED-R / G / B is the output interface of atmosphere lamp, DOOR 1 / 2 is the output interface of front and rear door switch, TD is the skylight or shutter output interface, FAN is the fan output interface, and Alarm is the buzzer / sound and light alarm output interface.

1.4 Equipment reset

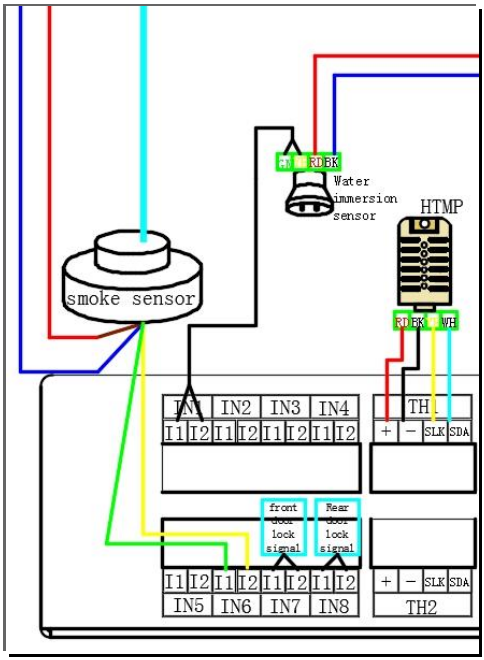
If you forget the device login password and other circumstances, you can choose to reset the moving ring host device.

Reset operation: In the normal operation of the moving ring host, press and hold the default pinhole reset button for about 15 seconds, and then release, and the moving ring host network light flashes, and the moving ring main chance starts after about 1 minute. Account number, password, setting and other information will be restored to the default value. After the operation is completed, the device information will be reconfigured, and some connected devices will need to be reconfigured.

2. Device connection diagram

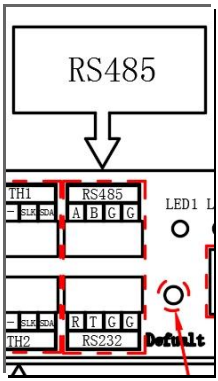
2. 1 Connect of dry contact sensor

Smoke, water immersion and other sensors use the dry contact sensor interface access to the moving ring, when the sensor alarm, will transmit the dry contact signal to the moving ring. The connection method is as shown in the figure below.



2.2 Power distribution and air-conditioning connection

The distribution controller and power distribution and air conditioner are connected through RS485 or EMS200 as shown in the figure below:



2. 3 Network device connection

Distribution controller, PDU, UPS and other network devices using SNMP communication, directly inserted into the switch to realize network communication and connection.

2.4 Connecting of the control part

The distribution controller controls other equipment through the relay, and the specific control connection part can consult our company.

kindly reminder:

For your future transportation and packaging convenience, please place the packaging materials in the box, and keep them properly.

pay attention to:

If the accessories are incomplete, please contact the supplier quickly.

2. 5 Equipment installation environment

◆ The placement position must be smooth.

◆ The distance between the outside of the case and the wall shall not be less than 10cm.

◆ The distance between the front and rear panels of the chassis and the wall is not less than 60cm.

◆ Stay away from the heat source, avoid rain, no direct sunlight, no corrosive.

◆ Maintain the normal temperature and humidity.

◆ Keep the room clean.

Statement

This is A class A product, in the living environment, the product of radio interference may be caused, in this case, users may be required to take practical measures for its interference.

3. Software use

The factory IP address of moving ring distribution controller is 192.168.2. 191 The default IP address of VK front-end network device is 192.168.2.X. If the user needs to modify the IP address, please modify it to the same network segment together with the front-end device, otherwise the moving ring distribution controller cannot access the front-end network device, and the front-end network device cannot communicate with the moving ring distribution controller.

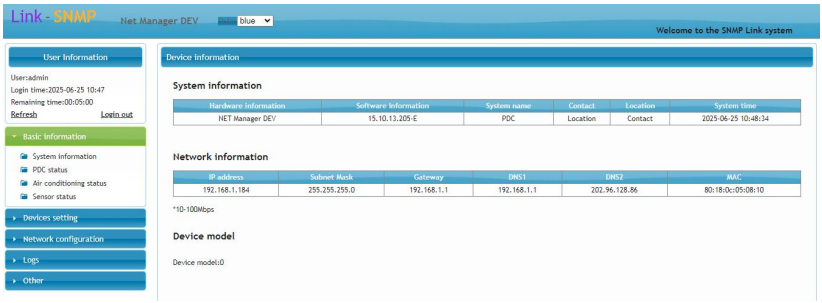
3.1 Software Login

Use the PC browser to enter 192.168.2. 191 to log in in the browser. Before login, please confirm the IP network segment of the PC, and enter the correct account number and password to enter the system.

3.2 Main interface of the software

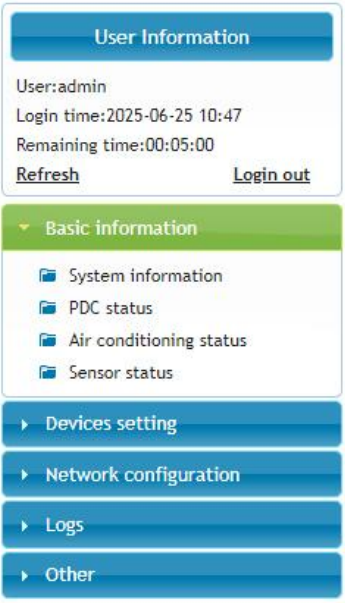
On the left side of the main monitoring page is the menu bar, which provides user function selection. On the right is the monitoring bar, showing the

monitoring or setting status.



3.3 Equipment information viewing

Equipment basic information view menu can be classified to view the distribution box PDC, air conditioning, sensor and other information. Click the relevant menu to enter the device information browsing interface. For example, click the distribution state to enter the distribution state view.as illustrated in following figure:

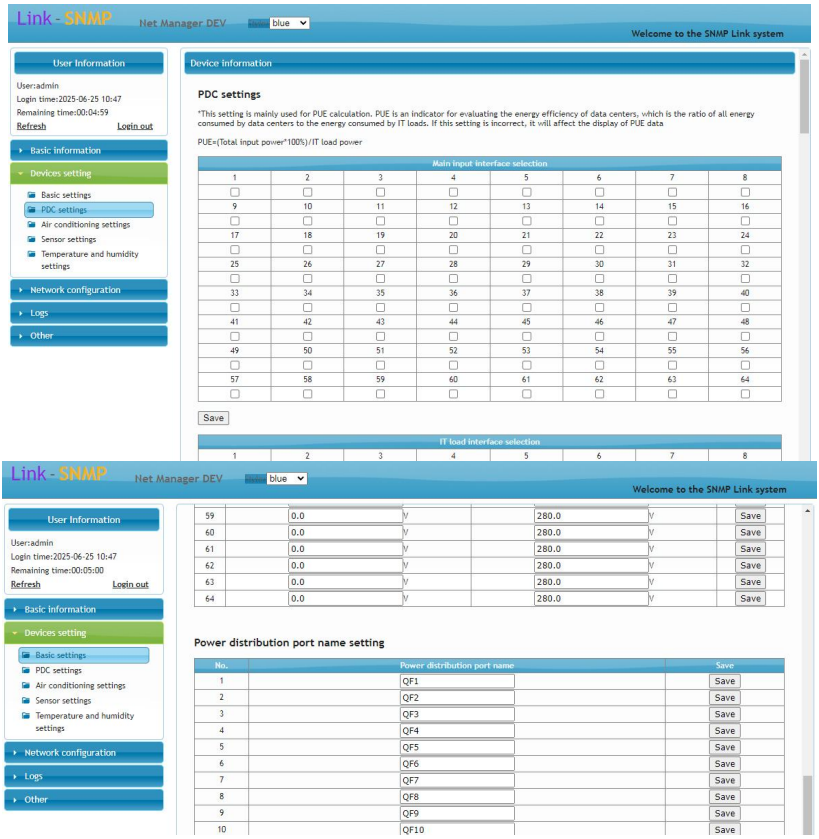


3.4 Equipment Settings

The equipment setting can set the threshold value of all kinds of equipment. If the equipment detection data exceeds the threshold value, it will produce an alarm and trigger the relay linkage. The moving ring distribution controller records the relevant alarm situation in the data log.

3.4.1 Intelligent distribution cabinet configuration:

enter the equipment Settings, click Basic Settings, select the current distribution protocol, click Save to restart and take effect; enter the distribution setting, set the distribution input and output port, voltage threshold, and custom name.

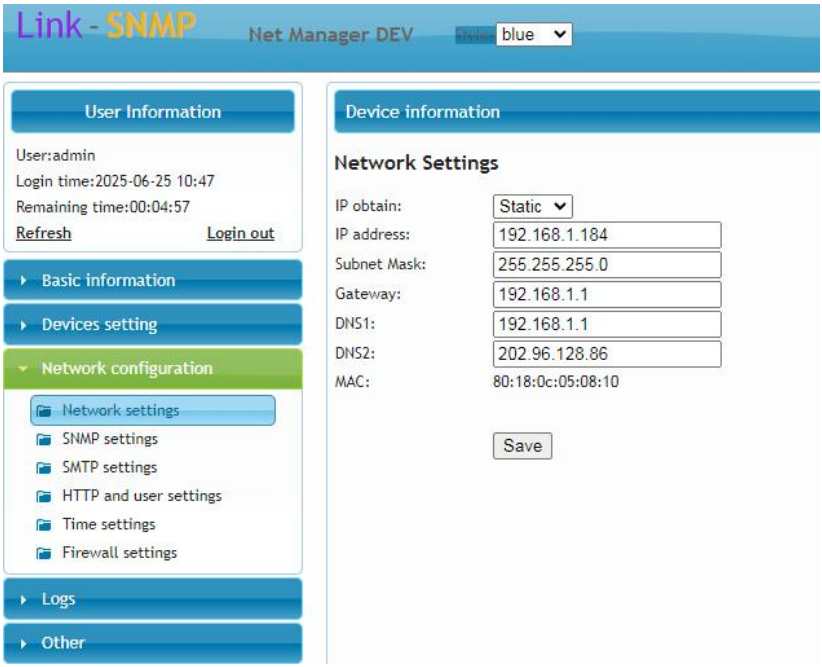


3.5 Network Settings

192	168	2	191
↑	↑	↑	↑
Network number	Network number	Network number	device address

The moving ring distribution controller connects the network equipment through SNMP protocol, so it is necessary to identify the network number of the whole machine room, for example, the moving ring IP address is

192.168.2.192, the other network equipment IP address can only be selected between IP address 192.168.2.1~192.168.2.255 to guarantee the host and the monitored equipment; change the network number of a device, all devices need to be changed with the same network number.

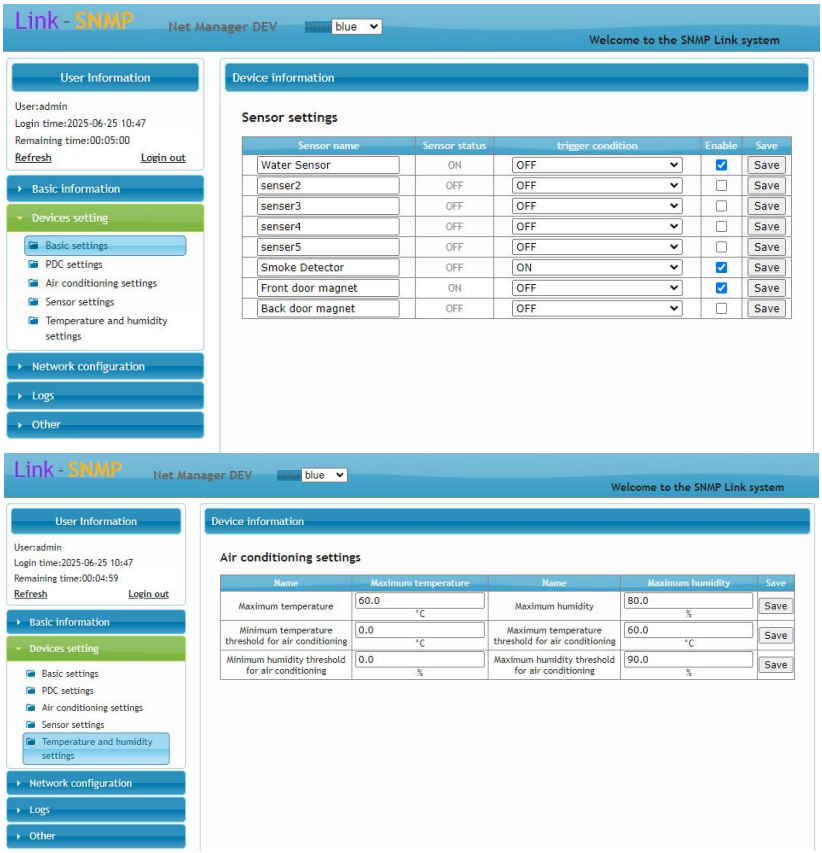


3.6 Sensor settings

The sensor is divided into two types of linkage trigger, one is the yellow alarm, the dry contact interface IN 1-IN 5, IN 7-IN 8 (the dry contact of front and rear doors) of the controller panel; the other is the red alarm, and the dry contact interface IN 6 (smoke) interfaces with the temperature and humidity sensor.

Sensor configuration: enter the device Settings, click the sensor Settings, set the sensor name and trigger mode, click enable, and then click Save;

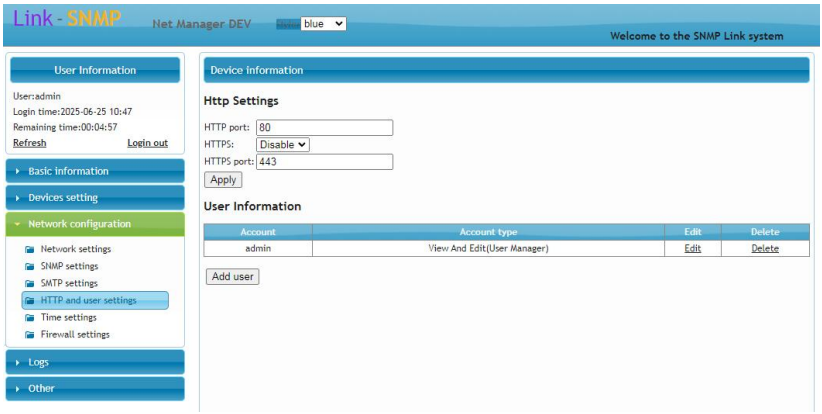
Temperature and humidity sensor setting: enter the device Settings, click the temperature and humidity set, set the temperature and humidity threshold, and click Save.



3. 7 User management

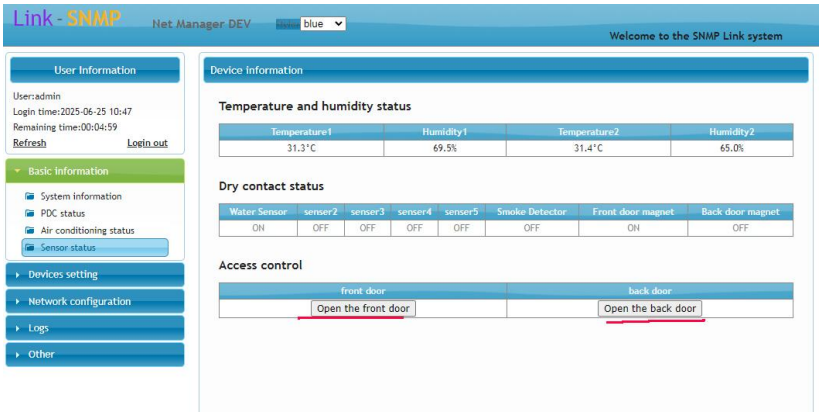
Users are divided into administrators and ordinary users, ordinary users can only view but not set.

In the User Management menu, click the new user to create a new user. If you need to modify the user information, click the edit menu of the user list, and the edit user interface will appear.



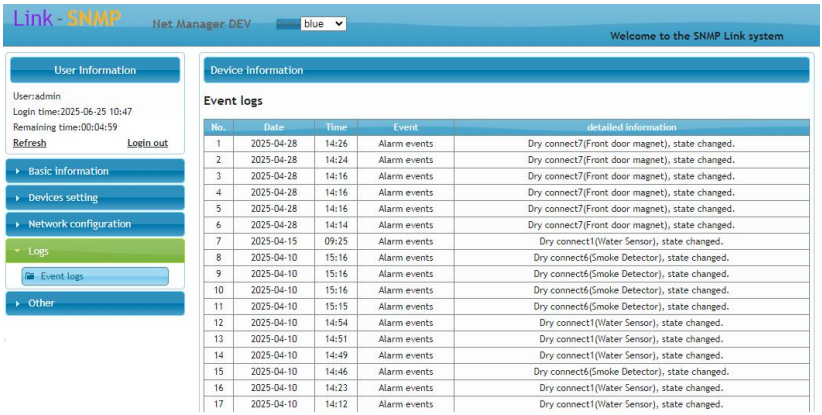
3.8 Door lock control

The moving ring interface can open the rear door lock (relay) of the integrated cabinet: enter the basic information, click the sensor status, you can enter the access control interface to manually open the front door or back door.



3. 9 Log information

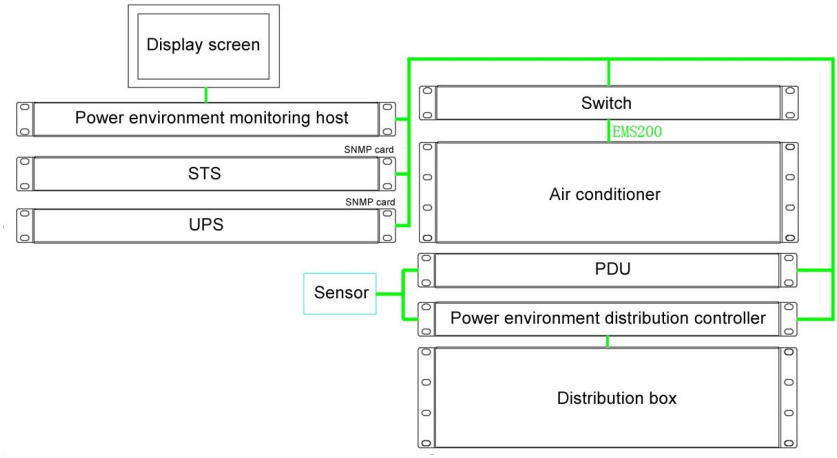
Equipment information records the alarm event of the device, and if the device exceeds the threshold set by the moving ring, the generated log information will be recorded there. Location: Enter the device settings, click Log Record, and then click Event Record.



3.1 0 Software upgrade

In the system setting, software upgrade menu, the latest program can be updated, please contact the customer service for the upgrade file. Upload the upgrade file in the upgrade interface, do not modify the file name, please follow the upgrade process.

4. Schematic diagram of the typical system connection



5. After-sales service

Note: In order to protect your interests, please keep the warranty card properly after your moving ring cabinet is used normally!

◇ During the product, if the failure occurs, please contact your supplier.

Warranty: The company shall guarantee the products, and the warranty period shall be executed according to the terms of the sales contract.

Warranty Certificate:

The valid warranty certificate of the product includes:

Product warranty card; valid purchase invoice for this machine.

Non-warranty liability:

The fault caused by the following factors is not within the scope of the warranty liability, and the maintenance fee shall be charged.

◇ Artificial damage in the process of transportation and handling;

◇ Damage caused by the incorrect installation method;

◇ Damage caused by incorrect switching method;

◇ Damage caused by the self-configured poor battery;

◇ Damage caused by earthquake, fire, flood and other irresistible natural disasters;

◇ Battery arrived idle for more than three months;

◇ The product has been inspected or repaired by the technical service personnel not trained by our company.

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Thank you for using our product!

If you have any questions about the use and maintenance of our products, please call us.