AP&T®

System Integrated Power Supply

AP-DY6702

User Manual

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AP-DY6702 System integrated power supply

♦ Product picture



◆ Product description

The AP-DY6702 system integrated power supply is a DC power supply for electrostatic monitoring and elimination systems produced by AP&T. It is an integrated power supply for power supply and signal transmission of pulsed DC ion fans, pulsed AC ion bars and static sensors.

The integrated power supply comes with a serial port server. The ESD protection device is connected to the integrated power supply through the RJ45 network port to provide working voltage and data transmission for the product. At the same time, the integrated power supply acts as a data interaction platform, and can connect the ESD protection device and the computer through wireless transmission and wired connection. A single integrated power supply can be connected to the computer via WIFI, or it can be wired to the computer via the RJ45 network port. When multiple units are connected, the wireless routers are connected to the local area network, and then connected to the computer through the router WIFI. The cascading LANs can be connected to the computer through the RJ45 network port.

♦ Features

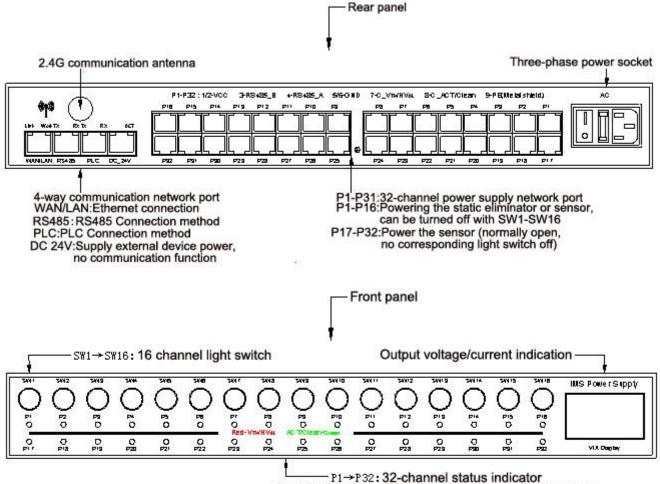
- 1) Output voltage and current display.
- 2) 16-way illuminated switch indication.
- 3) 32-way working status indicator.
- 4) RJ45 power connector.
- 5) RS485 and wireless communication functions.

♦Specifications

| No. | Basic Parameter | | | | | | | |
|--------|---|---|--|-------------------|-------------------------|----------------------|------------|--|
| 1 | Input voltage | | | AC175- | 240V | | | |
| 2 | Output voltage | DC24V | | | | | | |
| 3 | Output current | 12.5A | | | | | | |
| 4 | Output Power | 300W | | | | | | |
| 5 | Product Size | 380*160*50 | | | | | | |
| 6 | Work instructions | LED | | | | | | |
| 7 | Input indication | Digital display 0.28 Inch LED, monochrome | | | | | | |
| 8 | Product network port | 32 Port : P1-P32 | | | | | | |
| | Network port definition | 1、2 | 3 | 4 | 5, 6, 9 | 7 | 8 | |
| 9 | | White-oran ge, orange | White- blue | blue | White-green, green | White- brown | brown | |
| | | VCC | RS485 B | RS485_A | GND, PE | NPN-C | NPN- C2 | |
| 10 | Communication network port | DC \ PLC \ RS485 \ WAN/LAN | | | | | | |
| 11 | Illuminated switch | 16 Road: SW1-SW16 | | | | | | |
| 12 | Working environment | temperature: 0-50°C; humidity: 30-70% | | | | | | |
| 13 | Net weight | 2500g | | | | | | |
| 14 | Gross weight | 2950g | | | | | | |
| No. | | Function Parameter | | | | | | |
| | Network port | P1-P16 Static eliminator or static sensor | | | | | | |
| | | P17-P32 static sensor | | | | | | |
| | Network port | WAN/LAN | WAN/LAN Ethernet connection | | | | | |
| | | RS485 | RS485 PLC RS485 way | | | | | |
| 2 | | PLC | | | | | | |
| | | DC_24V | Supply external equipment power | | | | | |
| 3 | Illuminated switch | SW1-SW1 | Control the heater on and off (with green indicator light) | | | | | |
| | LED | P1-P32 | Red | Static eliminator | High voltage indication | flicker | | |
| | | | | Static eliminator | Threshold indication | | | |
| 4 | | | Green | Static eliminator | | Constantly bright | | |
| | | | | static sensor | Power on indication | | | |
| | | | | Static eliminator | Cleaning instructions | flicker | | |
| Note:1 | Note:1、P1 - P32: Due to power supply limitations, up to 20 consumers can be loaded. | | | | | | | |

♦ Function introduction

1, Functional diagram



Red light flashes: static eliminator / sensor valve alarm Steady green light: Static eliminator/sensor power-on indication Flashing green light: static eliminator cleaning instructions

2. Network port cable function information

| Network port cable function information | | | | | | |
|---|----------------------|--|--|--|--|--|
| 1, 2 | Orange, white-orange | VCC: +24VDC | | | | |
| 3 | Blue | RS485+B | | | | |
| 4 | White-blue | RS485+A | | | | |
| 5 | Green | GND | | | | |
| 6 | White-green | GND | | | | |
| 7 | Brown | V _{TH} : Sensor threshold alarm HV _{AL} : Consumer high voltage alarm | | | | |
| 8 | White-Brown | ACT: Sensor / static eliminator power up indication Clean: Static eliminator cleaning instructions | | | | |
| 9 | Metal shield | PE | | | | |

3. Features

- (1) The output voltage and output current are displayed in real time on the right side of the front panel of the power supply. The output voltage is fixed at 24V, and the output current is displayed in real time according to the load.
- (2). The first row of switches (SW1 \rightarrow SW16) and the first row of indicators (P1 \rightarrow P16) on the front panel of the power supply correspond to the first row of output connectors (P1 \rightarrow P16) on the rear panel, which are turned on/off by the switch control. When turned on, the ring light is green and the light is off when it is off. The second row interface (P17 \rightarrow P32) on the rear panel of the power supply is not controlled by the front switch and is in the normally open state. In actual use, it is recommended that the consumer (ion fan, ion wind bar) be connected to the first row of the rear panel of the power supply.
- (3). Comes with a serial port server, which has WIFI transmission function and supports wireless data transmission.
- (4). The power supply has a total of 36 RJ45 interfaces, 16*2 interfaces are used to support 32 devices (sensor/static eliminator), LAN connection ports are used to set up local area network, 1 RS485 interface, 1 PLC interface, 1 One DC24V power connector.
- (5). The 32 indicators on the front panel of the power supply correspond to the 32 output network ports on the rear panel one by one. The green light of the external device is working normally, and the red light flashes when the device alarms or works abnormally.

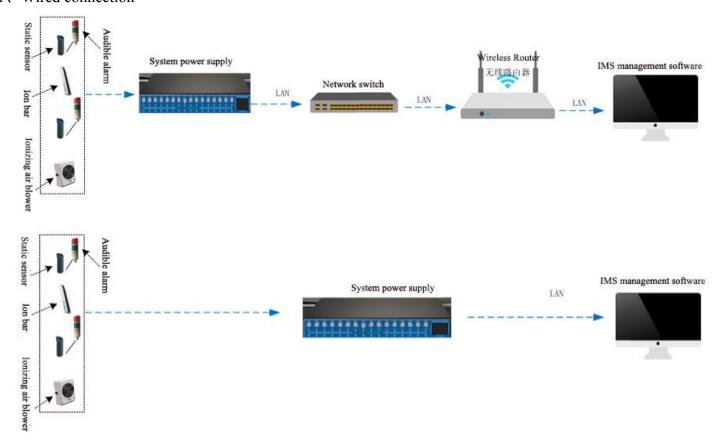
♦ Safety warning

- 1. Please read the instruction manual carefully before installing and using the device.
- 2. The working input power of the power box must be reliably connected to the grounding line of the electrical power supply line. The grounding resistance is less than 4 ohms; otherwise, the consumers and sensors may be abnormal or even damaged.
- 3. It is not advisable to use the device in a >70% humidity environment.
- 4. It is strictly forbidden to use this equipment in flammable and explosive environments.
- 5. It is strictly forbidden to disassemble the product without authorization. Internal maintenance and repair must be carried out by professionals.
- 6. The product is strictly prohibited from touching water stains, otherwise abnormalities may occur, resulting in electric shock or fire.
- 7. Turn off the power when inspecting or replacing the product, otherwise it may cause electric shock or fire.
- 8. The product is designed for static electricity monitoring. It is strictly forbidden to do other purposes. Any abnormal use may cause machine malfunction, electric shock, fire and other hidden dangers.
- 9. Before powering on the product, please check the input voltage. Any power supply that does not meet the specifications will cause damage or even failure.
- 10. Please check the power cord of the product regularly. If it is damaged, please replace it immediately, otherwise it will cause problems such as leakage and abnormal operation.

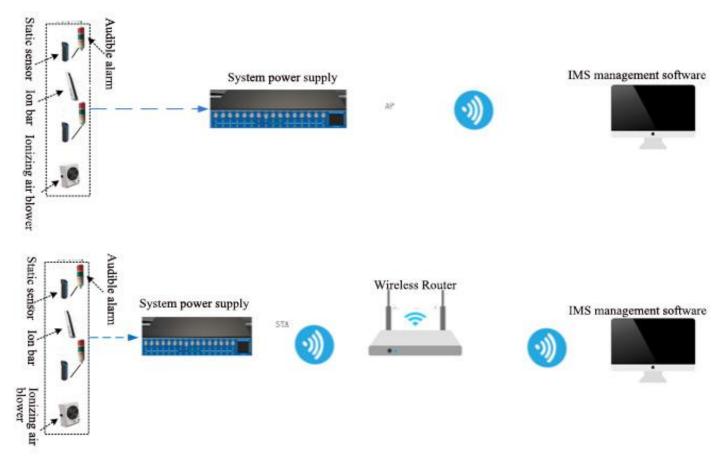
◆Installation instructions

First, the hardware installation

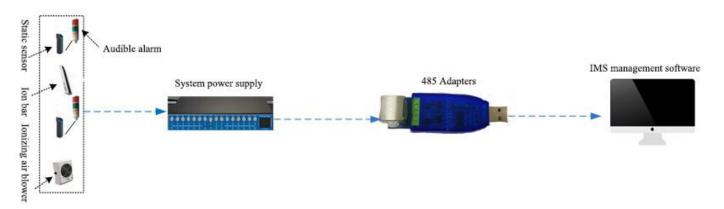
- 1. Fix the system integrated power supply firmly.
- 2. Plug the GB power cord into the socket on the rear panel of the system integrated power supply and turn on the power.
- 3. Insert the adapter power cable RJ45 plug of the consumer into the P1—P16 RJ45 socket of the system integrated power supply.
- 4. Plug the sensor's adapter power cable RJ45 into the P17-P32 RJ45 socket of the system integrated power supply.
- 5. After the system integrated power supply is powered on, the P17-P32 port is always in the power-on state, and only needs to be inserted into the device to work.
- 6. Press the circular switch SW1-SW16, and the green ring indicator lights up to indicate that the charger is powered on.
- 二、Communication connection
- 1, Wired connection



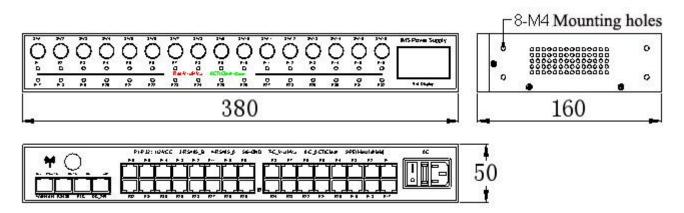
2. Wireless connection



3, 485Connection method



♦ External size chart



♦ Power maintenance

If the system integrated power supply confirms that the device is properly connected and the power supply is normal, the working status indicator on the front panel will be off if it is off. It should be stopped and repaired by professional maintenance personnel. It can be used after the electrical performance indicators are normal.

◆After-sale service

- 1. The system integrated power supply undergoes rigorous testing and aging treatment before leaving the factory, and the performance fully meets the relevant indicators marked in the instructions for use.
- 2. AP&T makes the following commitments to the user: Within one year from the date of purchase, the company will repair or replace any parts that have been inspected by the company for free. However, this commitment does not apply to the following:
- (1) The device was misused and installed;
- (2) Inadvertent or accidental damage during use;
- (3) Self-modification, disassembly, or repair by other service departments not authorized by Anping.
- 3. AP&T assumes no responsibility or liability for product users other than repair or replacement of parts specified herein.

♦ Packaging accessories

- 1, Manual 2, Certificate
- 3, GB power cord
- 4, Power network cable