

# AP&T®

## Product Instruction Manual

Digital display intelligent AC power supply  
AP-AY151X/251X



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## Product Description

AP-AY151X/251X digital display intelligent AC power supply is one of the high-voltage power supply series products for static eliminator produced by Anping Company (AP&T) which is designed for controlling the static electricity on the surface of the target to achieve the purpose of electrostatic safety protection for the discharged object. It is a digital display intelligent AC power supply with alarm function which is a dedicated configuration power supply for Anping's AC ion bar products.

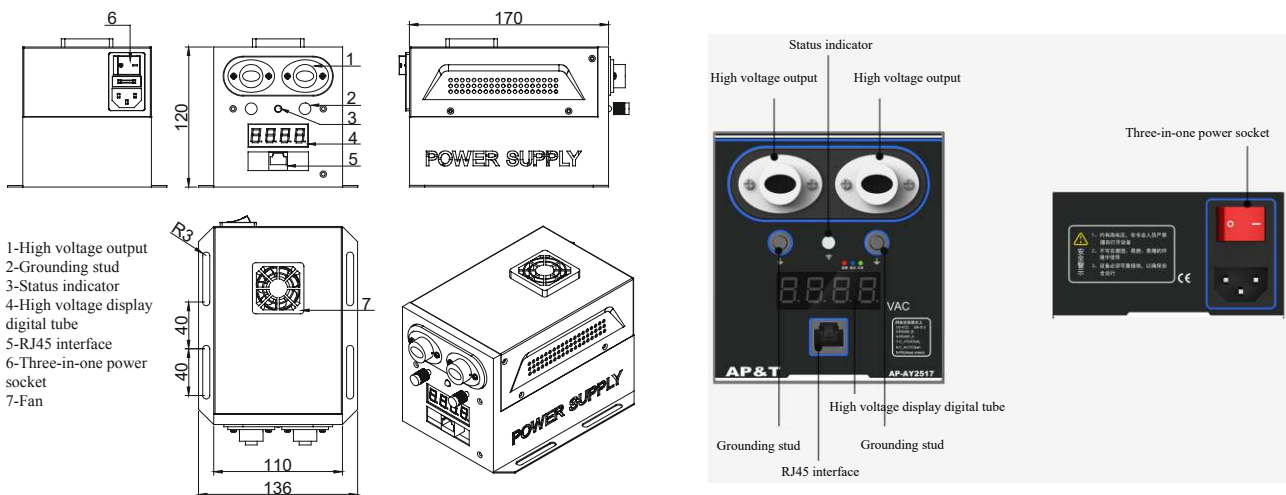
## Product Features

1. With energy storage components to ensure stable output power.
2. The fan can dissipate heat and ozone in real time to extend the service life of the power supply.
3. High voltage and low current working.
4. Pluggable interface which is easy to operate and install.
5. With voltage fault alarm function and the panel display shows the equipment working voltage in real time.
6. The power supply with communication function can be monitored online on the adapting software.
7. With short-circuit protection function, it will automatically cut off the power supply when the device is short-circuited.

## Specifications

|                     |  |                     |
|---------------------|--|---------------------|
| Model               | AP-AY1517/2517                                     | AP-AY1515/2515      |
| Input voltage       | AC220V/50Hz or AC110V/60Hz                         |                     |
| Output voltage      | AC7000V ( No load )                                | AC5600V ( No load ) |
| Power               | < 20W  |                     |
| Status indicator    | Red light—High voltage fault alarm                 |                     |
|                     | Blue light—cleaning, Blue light flashing—debugging |                     |
|                     | Green light—normal work                            |                     |
| Working temperature | - 10°C—+ 50°C                                      |                     |
| Working humidity    | <75%RH   |                     |
| Net weight          | 3050g  |                     |
| Dimensions          | L*W*H: 136*170*120                                 |                     |

## Product details and dimensions

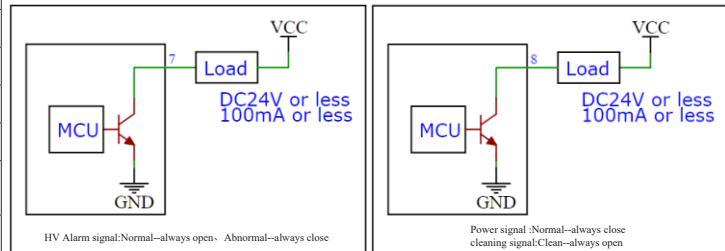


## Installation Guide

1. Insert the national standard power cord plug into the mains socket.
2. Insert the high-voltage connector of the static elimination device into the high-voltage output socket of the power supply and connect its ground terminal to the ground stud of the high-voltage power supply.
3. The switch indicator and status indicator light on (Green light on when working normally) and the display showing the working voltage value normally indicates the power supply working normally when turn on the power switch.
4. One end of the communication network cable should be inserted into the RJ45 communication socket on the front panel of the power supply, and the other end should be connected to a monitoring terminal or connected to a PC through a USB-485 converter. If communication is required. The port wiring and panel descriptions are as follows:

| Network port cable function information |                     |  |
|---|---------------------|--|
| 1、2                                     | Orange/White-orange | +24VDC   |
| 3                                       | Blue                | RS485+B  |
| 4                                       | White-blue          | RS485+A  |
| 5                                       | Green               | GND  |
| 6                                       | White-green         | GND  |
| 7                                       | Brown               | HV <sub>AL</sub> : High voltage alarm                  |
| 8                                       | White-brown         | ACT: Power on indication<br>Clean: Cleaning indication |
| 9                                       | Metal shield        | PE   |

The output wiring diagrams of pins 7 and 8 are as follows:



5. The cleaning cycle of the high-voltage power supply can be set by the remote control, as shown in the table below:



| Button function instructions    |                        |  |
|---------------------------------|------------------------|--|
| Unlock                          |                        | Unlock before adjusting operating parameters   |
| Run / Pause                     |                        | Device starts running when power is on. Press "STOP" to standby and no high voltage output. Press "RUN" again and the device will start working.     |
| Parameter display               | " +/-                  | Unlock, press +/- to switch the display of working address, cleaning cycle, working environment temperature/humidity, alarm threshold                |
| Adjust cleaning cycle           | CT <sub>TH</sub> " +/- | Press CT <sub>TH</sub> first, then press +/- to increase or decrease the cleaning cycle (Default 30 days, adjustment range is 1-60 days)             |
| Adjust alarm threshold          | AL <sub>TH</sub> " +/- | Press AL <sub>TH</sub> first, then press +/- to increase or decrease the high voltage alarm threshold (Default 1000V, adjustment range is 500-2000V) |
| Confirm                         | CAL " OK               | Press CAL first, then press OK to confirm after adjusting the output parameter   |
| Reset                           | CAL "                  | Reset, Press CAL first, then press   |
| Display information description |                        |  |
|                                 | 7000                   | Display the real-time high-voltage output value of the high-voltage power supply: 7000VAC  |
|                                 | A00                    | Display the working address of the high-voltage power supply: 00   |
|                                 | E15                    | Display the cleaning cycle of the matching ion bar: 15 (Unit: day)   |
|                                 | C19                    | Display the internal working environment temperature of the high-voltage power supply: 19°C  |
|                                 | H19                    | Display the internal working environment humidity of the high-voltage power supply: 19%RH  |
|                                 | 1000                   | Display the alarm threshold of the high-voltage power supply: 1000VAC<br>(eg: High voltage from 7000VAC 1000VAttenuation 6000VAC alarm)              |

## Maintenance

It should be stopped and repaired by professional maintenance personnel when the red switch work indicator on the back panel of the high voltage power supply is off, or the status indicator on the front panel is red or off, or the display is abnormal. It can be used only after the electrical performance indicators are normal.

| NO | Problems                                       | Reasons  | Solutions   |
|----|--|--|---|
| 1  | The switch indicator on the back panel is off  | Poor contact of the power cable  | Check whether the power cable is in good condition and securely connected   |
|    |  | No power supply  | Check the on-site power supply lines  |
| 2  | The status indicator on the front panel is red | No power supply from high voltage transformer  | Return to factory for maintenance   |
|    |  | High voltage transformer is damaged  | Return to factory for maintenance   |
|    |  | High-voltage components is damaged   | Return to factory for maintenance   |
| 3  | The panel indicator light is blue              | Cleaning indication  | Ion bar and power supply cleaning maintenance   |
| 4  | The display is abnormal or fuzzy               | Abnormal discharge   | Check the connection between the high-voltage plug of the ion bar high-voltage cable and the power supply high-voltage socket to confirm that the plug is inserted in place |
| 5  | The product is smoky or burnt                  | The high-voltage transformer or high-voltage components are damaged or the insulation of the discharge socket is damaged | Return to factory for maintenance   |

## Safety warning



Warning

1. Please read the instruction manual carefully before installing and using this equipment.
2. The working input power of the power box must be reliably connected to the grounding wire of the electrical power supply cable and the grounding resistance should be less than 4 ohm; Otherwise, it is easy to cause abnormal or even damage of ion bar and high voltage power supply.
3. Do not use this equipment in environment where humidity is  $> 70\%$ .
4. It is strictly forbidden to use this equipment in flammable and explosive environments.
5. Unauthorized disassembly of the product is strictly prohibited, internal maintenance and repair must be performed by professionals.
6. It is strictly forbidden to touch liquid during use, otherwise an abnormality may occur and cause electric shock or fire.
7. Power must be turned off during inspecting or replacing the product, otherwise it may cause electric shock or fire.
8. The product is specially designed for eliminating static electricity. It is strictly forbidden to use it for other purposes. Any abnormal use may cause machine failure, electric shock, fire and other accidents.
9. Please check the input voltage before powering on the product. Any power supply that does not meet the specifications will cause damage to the product.
10. Please check the product power cord regularly and replace it immediately if it is damaged. Otherwise it is easy to cause problems such as electric leakage and abnormal operation.

## After-sales service

1. AP-AY151X/251X digital display intelligent AC power supply has undergone rigorous testing and aging treatment before ex-work. Its performance has completely reached the relevant indicators marked in the usage instruction.
2. AP&T makes a commitment to the customer that any defective parts inspected by AP&T will be repaired or replaced free of charge within one year from the date of purchase. However, this commitment does not apply to:
  - a. The device is incorrectly used or installed.
  - b. Damage caused by negligence or accident during use.
  - c. Modified, disassembled or repaired by other service departments not authorized by Anping Company.
3. AP&T shall not be liable for any incorrect use of the products except for repair or replacement of parts as specified above.

## Packaging accessories

- 1、 Manual
- 2、 Certificate of conformity
- 3、 National standard power cord
- 4、 Remote control
- 5、 Network cables, converters and matching software are optional if communication function is required