APS-6000 AC POWER SOURCE

User Manual

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Chapter Ⅰ Overview

The APS-6000 adjustable AC power source is a multi-function AC power source that integrates voltage, current, power and power factors. The internal high-speed processor is a cost-effective, high-stability AC power source. It is widely used in the production lines, laboratories and quality inspection departments of lighting enterprises, electric tools, household appliances, motors, electric appliances and other fields.

APS-6000 AC Power Source has the following characteristics:

1. Digital display, and intuitive reading;
2. Four windows simultaneously quickly display true RMS voltage, true RMS current, peak current, power, power factor, frequency;
3. Automatic conversion of voltage and current ranges to improve measurement accuracy;
4. Measurement accuracy is not affected by waveforms;
5. High reliability and long life;
6. The upper and lower limit parameters can be set freely and have qualified signal power. Batch testing improves efficiency;

Chapter II Technical indicators

1. Measurement range and basic error

APS-6000

Measurement item	Measurement range	Basic error
True RMS voltage	1.00 V ~300.0V (Automatic range)	±(0.5%digits +0.1%range +3 digits)
True RMS current	0.1 mA ~3000mA (Automatic range)	±(0.5% digits +0.1% range +3 digits)
Peak current	1 mA ~3500mA (Automatic range)	±(0.5% digits +0.1% range +3 digits)
Power	0.01 W ~900W	±(0.5% digits +0.1% range +3 digits)
Power factor	0.000~1.000	±(0.5% digits +0.001/ digits +3 digits)

2. Power supply requirements

Power Voltage: 220V±10%

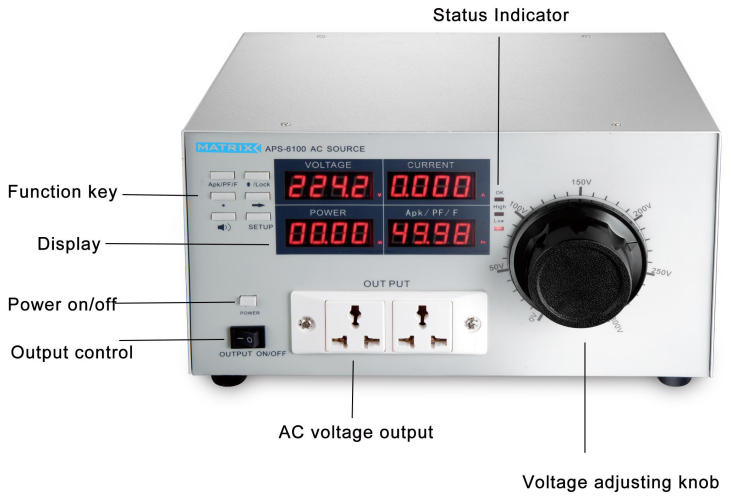
Power Frequency: 45Hz~65Hz

Max Power: 1000VA

3. Size: length*width*height=320mm×170mm×220mm
4. Weight: About 10kg

Chapter III Using Instructions

The front panel of the instrument is shown:



1、Function key instruction:

"SETUP" key: When the button is pressed for the first time, the instrument enters the setting state from the measurement state; each time after pressing, it determines a set parameter, and the instrument enters the setting of the next parameter. After all the parameters are set, press the button again. Key, the instrument automatically exits the setting state and returns to the measurement state.

"↑/LOCK" key: Press this button in the setting state, the flashing bit data changes cyclically from 0→1→2→3→•••→9→0, and press this button to lock or unlock the button in the standby state!

"→" key: Press this button in the setting state to shift the data flashing bit to the right by one bit.

" ." key: Press this button in the setting state to shift the decimal point to the right by one bit.

"Apk/ Hz/PF" key: Press this button in the measurement state, the window in the lower right corner of the display is cyclically displayed between "current", "frequency" and "power factor".

"Voice" key: Pressing this button in the measurement state will invalidate the buzzer sound of the instrument. If the sorting result is qualified, the buzzer will not sound; press this button again, the buzzer will be valid again. If the sorting result is qualified, the bee Sounder gives a hint.

2. The upper and lower limit setting steps:

- First determine the limit parameters of the product to be tested.
- Press the "Set" button and the instrument will enter the setting state. The current window displays the current upper limit parameter, and the data of the first bit is flashing, and the "upper limit" indicator is on, indicating that the current upper limit parameter status is being set. Press "↑" to change the flashing digit data to the set number, then press "→" to change the flashing digit, change the digit data, set the 4 digits to be set in sequence, and press "." to change the decimal point position. After setting the current upper limit value correctly, press the "Set" button to confirm, the instrument saves the current upper limit value, and the instrument enters the current lower limit value setting state.
- In the state of the instrument setting current lower limit parameter, the current window displays the current lower limit parameter, the first bitThe data is flashing and the lower limit indicator is on. Adjust the desired parameter by pressing "↑", "→", ".", confirm by "Setting", the instrument saves the current lower limit value, and the instrument enters the power upper limit setting state.
- In the instrument setting power upper limit parameter state, the power window displays the power upper limit parameter, the first bit of data is flashing, and the upper limit indicator is on. Adjust the required parameters by pressing "↑", "→", ".", confirm by "Setting", the instrument saves the power upper limit value, and the instrument enters the power lower limit setting state.
- In the instrument setting power lower limit parameter state, the power window displays the power lower limit parameter, the first bit

of data is flashing, and the lower limit indicator is on. Adjust the desired parameter by pressing "↑", "→", ".", and confirm by "Setting". The instrument saves the power lower limit value and the instrument enters the PF value upper limit setting state.

- In the instrument setting PF value upper limit parameter state, the power window displays the power upper limit parameter, the first bit of data is flashing, and the upper limit indicator is on. Adjust the desired parameter by pressing "↑", "→", ".", and confirm by "Setting". The instrument saves the power upper limit value and the instrument enters the PF value lower limit setting state.
- When the instrument sets the PF value lower limit parameter state, the power window displays the power lower limit parameter, the first bit of data flashes, and the lower limit indicator lights. Adjust the desired parameters by pressing "↑", "→", ".", press "Setting" to confirm, the instrument saves the power lower limit value, and the instrument automatically exits the upper and lower limit setting status.
- After the data is set, the instrument saves the set data. After the instrument is powered off, it will be powered on again. The data will not be lost. Unless it is reset, the data will not change and can be saved permanently.

Chapter III Using environment and warranty

1. Using environment

- Normal working conditions

  Temperature: (0~40) ℃

  Relative humidity: ≤80%

- Power supply

  Voltage: 198V~242V

  Frequency: 45Hz~65Hz

Note: Never use the instrument in a place with flammable or explosive materials. Any use of electrical equipment or electronic equipment in such an environment may cause safety damage.

2. Warranty

The warranty period of the instrument is one year from the date of purchase. During the warranty period, the instrument is damaged due to improper operation of the user. The maintenance cost and the cost caused by the repair are borne by the user. The instrument is responsible for lifetime maintenance by the company.

Users may not open the instrument case without the written consent of the company, which will affect the warranty of the instrument.

Instrument maintenance should be carried out by professional technicians authorized by our company; please do not replace the internal components of the instrument without any repair; after the

instrument is repaired, it needs to be re-calibrated to avoid affecting the test accuracy. Due to the blind maintenance of the user, the instrument is damaged due to the replacement of the instrument components, which is not covered by the warranty, and the user should bear the maintenance cost.