

MPS-3206

Economic Regulated Power Supply User Manual

IV Panel feature

1. Front panel

I Overview

MPS-3206 series is a kind of economic regulated DC power supply with good quality and high stability; it has LED four digit voltage and current display, over voltage protection (OVP)、 over current protection (OCP)、 over temperature protection (OTP) , etc., OVP/OCP can be set according to requirement. It is a good tool for colleges teaching, factory production, equipment maintenance etc..

II Specification

| Model | Voltage | Current | LED Display |
|----------|---------|---------|-------------|
| MPS-3206 | 0-32V | 0-6.1A | 4 bits |
| MPS-3210 | 0-32V | 0-10A | 4 bits |
| MPS-6205 | 0-62V | 0-5.1A | 4 bits |

III Technical Parameter

- Rated working condition
Working voltage: AC 220V ± 10% 50Hz
Working condition: temperature 0~40° C relative humidity: W80%RH
Storage condition: temperature -15-60° C relative humidity: W80%RH

- Technical indicator: (23°O±5°O)

| Model | MPS-3206 | MPS-3210 | MPS-6205 | |
|----------------------|-----------------|----------------|---------------|----------------|
| Rated input voltage | AC220V/110V±10% | | | |
| Rated output voltage | 0~32V | 0~32V | 0~62V | |
| Rated output current | 0~6A | 0~10A | 0~5A | |
| Load regulation | Voltage | < 0.1%+5mV | < 0.1%+10mV | < 0.1%+5mV |
| | Current | < 0.2%+3mA | < 0.2%+5mA | < 0.2%+3mA |
| Line regulation | Voltage | < 0.01%+5mV | < 0.01%+10mV | < 0.01%+5mV |
| | Current | < 0.2%+3mA | < 0.2%+5mA | < 0.2%+3mA |
| Setting accuracy | Voltage | ≤0.1%+1 digit | ≤0.1%+1 digit | ≤0.1%+2 digits |
| | Current | ≤0.2%+3mA | ≤0.2%+5mA | ≤0.2%+3mA |
| Setting resolution | Voltage | 10mV | 10mV | 10mV |
| | Current | 1mA | 1mA | 1mA |
| Readback accuracy | Voltage | ≤0.1%+1 digit | ≤0.1%+1 digit | ≤0.1%+2 digit |
| | Current | ≤0.2%+3mA | ≤0.2%+5mA | ≤0.2%+3mA |
| Readback resolution | Voltage | 10mV | 10mV | 10mV |
| | Current | 1mA | 1mA | 1mA |
| Ripple | Voltage | ≤10mVrms | ≤10mVrms | ≤10mVrms |
| | Current | ≤5mA Arms | ≤5mA Arms | ≤5mA Arms |
| OVP | 0~32V±0.2%FS | 0~32V±0.2%FS | 0~62V±0.2%FS | |
| Max. voltage | 32V±0.2% | 32V±0.2% | 62V±0.2% | |
| OCP | 0~6.1A±0.2%FS | 0~10A±0.2%FS | 0~5.1A±0.2%FS | |
| Max. current | 6.1A±0.2% | 10A±0.2% | 5.1A±0.2% | |
| Temperature | Operation | 0 ~ 40°C≤80%RH | | |
| Coefficient | Storage | -15~70°C≤80%RH | | |
| Size (W*H*D) | mm | 115*96*261 | | |
| Packing size (W*H*D) | mm | 167*153*317 | | |
| Net weight | kg | 1.5 | | |
| Gross weight | kg | 1.9 | | |



- Voltage display window(display voltage).
- Current display window(display current).
- "M1-M5" save/recall key, press the key lightly, indicator light up, recall the storage parameter, long-press save the parameter, after setting voltage and current, , press the key till the indicator light up, then the parameter get saved.
- POWER switching key, turn on/off instrument power.
- Output votalge/current adjustment knob, using with function "7" V/I setting key: in standby or output state, press the V/I key.at this time, the voltage window flashes, clockwise rotation, output voltage increases, counterclockwise rotation, output voltage decreases, press the knob in to change the blinking digit bit. To change the current, press the "V/I" button to switch to the current window to blink, rotate clockwise to increase the output current, rotate counter clockwise to decrease the output current, and press the knob to change the flashing digit bit.
- OVP/OCP setting key, long press OVP/OCP, enter the OVP feature set, when screen display "OVP" ,the set value can be changed by rotating knob(method same as the voltage and current value setting), after entering into the OVP feature set mode, OVP function can be opened or closed by pressing OVP/OCP key lightly (if the function is opened, the upper right corner of the screen will display OVP), after entering into the OVP feature set pattern long pressing OVP/OCP key can enter the OCP function setting mode,screen shows "OCP", at this point the set value can be changed by knob(method same as the voltage and current value setting), after entering into the OCP function set mode, OCP function can be opened or closed by pressing OVP/OCP key lightly (if function is opened, the upper right corner of the screen will display OCP). Long press the OVP/OCP again can return to OVP set pattern, the function will be automatically closed after few seconds of screen flashing when no setting, the screen right upper corner OVP/OCP on state, protection function is triggered when the actual output value is higher than the set point, if the screen shows EROCP -7" - EROVP - ", press "ON/OFF" to clear it.
- Voltage/current setting key, using with knob (refer to No.5 knob function introduction).
- ON/OFF key, control power output on/off, when power is on, the ON/OFF indicator at right lower corner will light up, otherwise it is off. When the instrument is in OVP/OCP protection state, it can be reset by this key.

9. Output terminal negative (black).
10. Output grounding terminal (green), this terminal is connected to the housing and to the grounding wire of power cord.
11. Output terminal positive (red).
12. CV stable voltage operation state indicator light: this light will be on when it works in stable voltage.
13. CC stable current operation state indicator light: this light will be on when it works in stable current.

2 . Rear panel



V Using instruction and protection measures

1. Set POWER switch in off state, plug in the power cord, make sure the power cord L end connect to the fire cord of the power socket, and the grounding wire should be well connected to the earth.
2. MPS-3206 power supply must be grounded.
3. Attention should be paid to ventilation when using this power supply. The gap between upper, lower, left, right and other objects should be maintained at 10cm to ensure smooth ventilation. Do not expose this power supply to dusty, corrosive gases and other hazardous substances.
4. The measurement of the technical parameter of this power supply should be conducted after starting up for 15 minutes.
5. Check whether the power supply voltage input conversion switch is in line with the mains before power on, otherwise it will cause serious failure.

VI Packing list

1. MPS3206 *1pc
2. Power cord*1pc
3. Test lead*1pair
4. User manual*1pc

VII Maintenance

1. When the power supply voltage is normal, but the digital display table does not light up after starting up, the fuse may be get burnt or there is some other fault, turn off the power switch, plug out the power cord, replace the fuse or ask a professional to check
2. When the voltage regulator is in use, if the output current is larger than the predetermined value and the CC lamp is on, which means it is in current protection. The machine will automatically switches to the steady current working state. At this time, the load should be checked or maximum current should be increased according to the use situation
3. When the current regulator is in use, the output current is less than the predetermined value and the CV lamp is on, which is an open circuit voltage protection. The machine will automatically switches to the stable working state. At this time, the load should be checked or the maximum voltage should be increased according to the using situation
4. If the problem cannot be solved, please contact your local distributor or our company

Warranty Card

What the warranty covered:

If the machine break down due to its defectiveness, MATRIX will provide free maintenance during warranty period. If the machine break down due to wrong operation or carelessness, then Matrix provide paid service within warranty period.

How long does this warranty last:

This warranty lasts for 3 years from the date of original purchase of all MATRIX branded products.

Who is covered:

This warranty covers only the original purchaser of this product. This warranty is not transferable to subsequent owners or purchasers of this product.

What do customers need to do to get repairs/service under the warranty policy?

If the machine get problem, please contact our local distributor. If you cannot find the local distributor, you can contact us directly, our email is service@szmatrix.com, our telephone No. is 0086 755 2836 4276.

What information do customers need to supply?

| | |
|---------------------|--|
| Model No. | |
| Serial No. | |
| Problem description | |
| Picture | |
| Video if necessary | |