osi1201 Series

50 kV; 50 W; automatic calibration



Product introduction

The OSIMAI osi1201 high-voltage power supply uses fully digital PID control, with overvoltage, overcurrent and short-circuit protection. Fast voltage/current transient response and stable output up to 0.01% are provided. When external calibration equipment is connected, the automatic-calibration function corrects voltage, current and output values with one key.

Product features

- Maximum output voltage 50 kV, adjustable
- Maximum output power 50 W
- RS-485 digital communication interface
- Maximum output current 1 mA
- Comprehensive fault protection

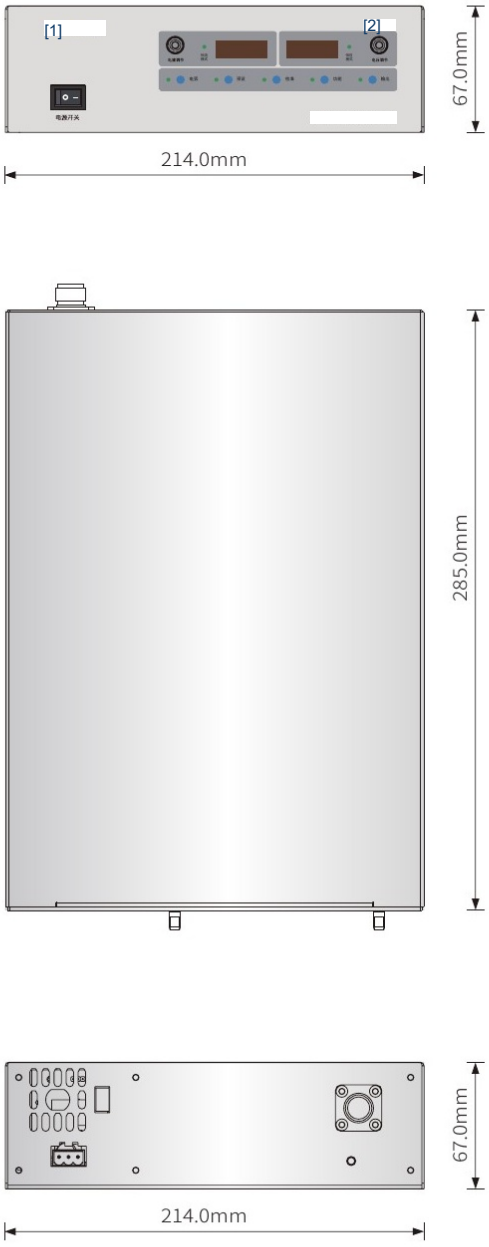
Specifications

Parameter	Specification
Input	220 VAC ±10%, 50/60 Hz.
Output	Maximum voltage 50 kV; maximum output current 1 mA; maximum power 50 W.
Front-panel functions	Power ON/OFF; self-start selection; memory selection; voltage/current presets; HV ON/OFF; user-interface settings; voltage-output adjustment.
Front-panel status indications	Polarity; constant-voltage/constant-current mode; self-start status; memory status; preset status; output status; abnormal-code display.
Voltage control	A built-in rotary encoder adjusts output voltage from zero to the maximum.
Current control	Current adjustment is available through the preset function.
Coarse/fine adjustment	The power supply automatically identifies coarse or fine adjustment from knob rotation speed. Fast rotation produces large output steps; slow rotation produces small output steps.
Remote control	Optional RS-485 digital communication interface communicates with a host computer or other digital equipment. Host software is supplied for testing only. The equipment uses the Modbus communication protocol; related information is provided in the appended communication-protocol section.
Voltage regulation	Load: better than 0.01% from no load to rated load. Line: ±0.01% for ±10% input-voltage variation.
Current regulation	Load: better than 0.01% from no load to rated load. Line: ±0.01% for ±10% input-voltage variation.
Ripple voltage	Better than 1% Vrms at rated output; 0.1% Vp-p optional.
Ambient temperature	Operating: 0°C to +50°C. Storage: −20°C to +80°C.
Temperature coefficient	Voltage and current: better than 100 ppm/°C.
Stability	Less than 0.1% per 8 hours after a 0.5-hour warm-up.
Humidity	10–90%, non-condensing.
Voltage/current display	Three-digit display; voltage accuracy ±(0.5% + 1); current accuracy ±(4% + 3).
Dimensions	Width 214 mm, height 67 mm, depth 285 mm.
Weight	Approximately 4.8 kg.
High-voltage cable	Shielded cable supplied. Standard length 2 m, outside diameter 5.5 mm. Other lengths are optional.

Typical applications

Electrostatic flocking; electrostatic filament splitting; electrostatic sorting; static elimination; electrospinning; electrostatic printing and other electrostatic applications.

Outline dimensions



[1] OSIMAI

[2] osi1201