osi1203 Series

Rated voltage 50/60/100 kV; rated power 150 W



Product introduction

The OSIMAI osi1203 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%.

Product features

- Maximum output voltage 50/60/100 kV, adjustable
- Maximum output current 3/2.5/1.5 mA
- Maximum output power 150 W
- Comprehensive fault protection
- RS-485 digital communication interface

Specifications

Parameter	Specification
Input	220 VAC ±10%, 50/60 Hz.
Output	Maximum voltage 50/60/100 kV; maximum output current 3/2.5/1.5 mA; maximum power 150 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; supply-fault reset function; 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.
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% rms at rated output; 0.1% p-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	50/60 kV: three-digit display; accuracy ±0.2% at rated output. 100 kV: three-digit display; accuracy ±1% at rated output.
Dimensions	50/60 kV: width 214 mm, height 67 mm, depth 285 mm. 100 kV: width 270 mm, height 88 mm, depth 445 mm.
Weight	50/60 kV: approximately 4.8 kg. 100 kV: approximately 12.75 kg.
High-voltage cable	Standard length 2 m, shielded. Outside diameter: 50/60 kV, 10 mm; 100 kV, 16 mm. Other lengths optional.

Model selection — 150 W (customizable)

Rated output (kV)	Rated output (mA)	Positive polarity	Negative polarity
50	3	osi1203P50-150	osi1203N50-150
60	2.5	osi1203P60-150	osi1203N60-150
100	1.5	osi1203P100-150	osi1203N100-150

Input terminals

Marking	Signal
L	Live
N	Neutral
G	Ground

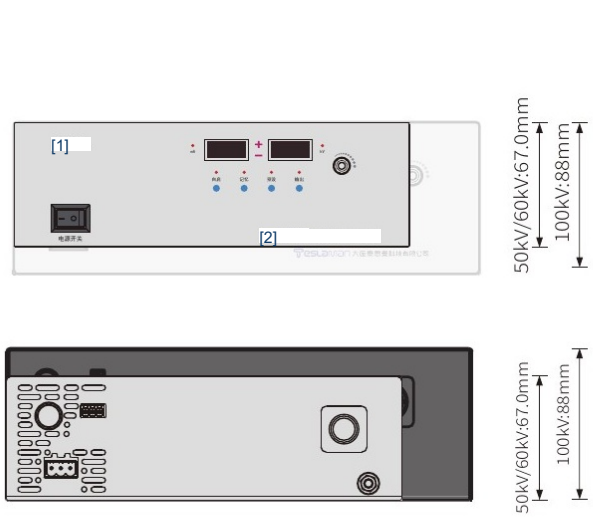
RS-485 communication interface

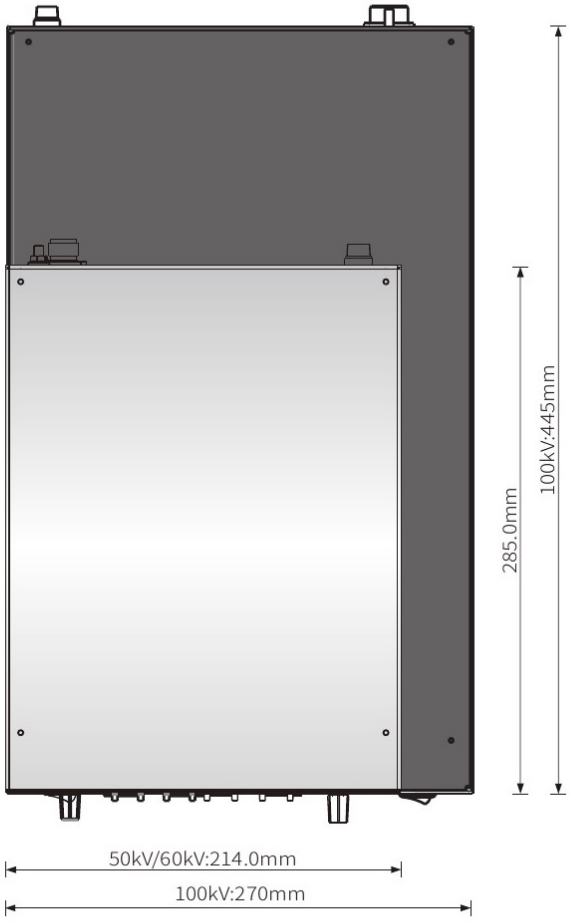
Marking	Signal
L	Live
N	Neutral
G	Ground

Typical applications

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

Outline dimensions





[1] osi1203

[2] OSIMAI