osi1200 Series

30 kV; 30 W; digital PID; less than 1U high; digital communication



Product introduction

The OSIMAI osi1200 series is an intelligent modular high-voltage power supply. Fully digital control supports a range of custom functions. Fast voltage/current transient response ensures fault-free operation. Comprehensive functionality and a broad output range are provided, and software can be used to add user-required custom functions.

Product features

- Maximum output voltage 30 kV
- Maximum output power 30 W
- Customizable protection modes
- Preset output values
- Overvoltage and overcurrent protection
- RS-485 digital communication
- Digitally programmable

Specifications

Parameter	Specification
Input	220 VAC ±10%, 50/60 Hz.
Output	Rated voltage 30 kV, rated current 1 mA; continuously adjustable from zero to maximum voltage; single negative output polarity.
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.
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.
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	Better than 1% rms at rated output; 0.1% rms 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.
Voltage/current indication	Three-digit LED display; accuracy ±1% at rated output.
Dimensions	Width 141.2 mm, height 40 mm, depth 217 mm.
Weight	Approximately 1.8 kg.
High-voltage cable	Unshielded cable supplied. Standard length 2 m, outside diameter 5.5 mm; non-detachable.

Input terminals

Marking	Signal
L	Live
N	Neutral
G	Ground

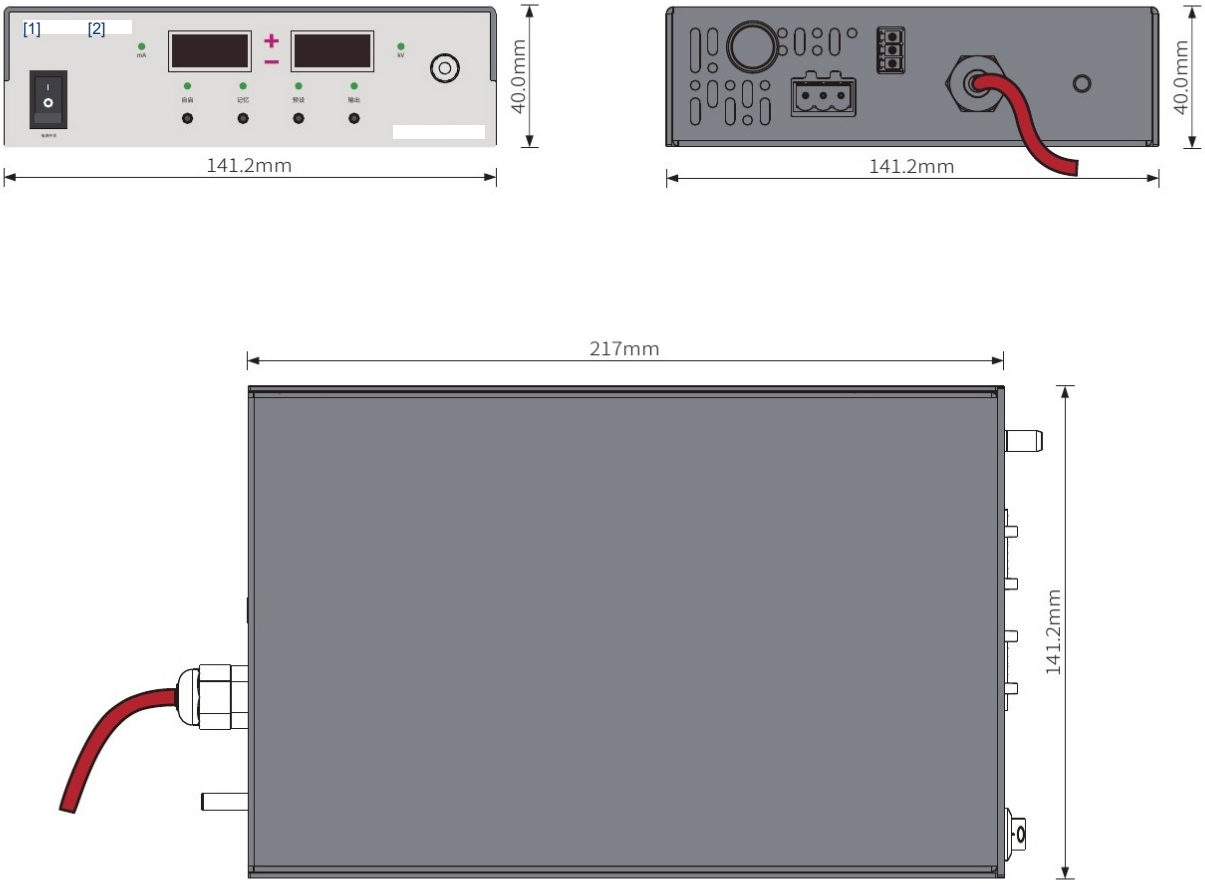
RS-485 communication interface

Marking	Signal
A	Signal wire
B	Signal wire
G	Signal ground

Typical applications

Electrostatic fields; electrostatic spinning; electrostatic printing; electrostatic generation; static elimination; microcapsule processing machines; nonwoven fabric production; withstand-voltage testing; electron acceleration; scientific research and other applications.

Outline dimensions



[1] OSIMAI

[2] osi1200