osi1627 Series

30 kV; 120 W; solid-state construction



Product Introduction

The OSIMAI osi1627 series high-voltage power supply supports electrostatic precipitators and air/oil-fume purification equipment. An external potentiometer provides remote high-voltage output control. Optional functions include external voltage indication, output overvoltage and short-circuit protection, and constant-current output control.

Product Features

- Maximum output voltage 30 kV
- Adjustable output voltage
- Dual closed-loop control
- Solid-state construction
- Maximum output power 120 W
- Adjustable output current
- Supports external voltage and current LCD displays
- Customization available

Specifications

Parameter	Description
Input	220 VAC ±10%, 50/60 Hz; 110 VAC input optional.
Output	Selectable maximum voltages from 1–30 kV; maximum power 120 W. Continuously adjustable from zero to maximum voltage. Positive or negative single-polarity output.
Remote control voltage	0–10 V.
Voltage control	External potentiometer remotely adjusts output voltage from zero to maximum.
Current control	External potentiometer remotely adjusts output current from zero to maximum.
Voltage/current regulation	Load: ±0.1%, no load to rated load. Line: ±0.1% for ±10% input-voltage change.
Ripple	Better than 1% peak-to-peak at rated output; 0.1% peak-to-peak optional.
Ambient temperature	Operating: 0 to +50°C. Storage: −20 to +80°C.
Temperature coefficient	Voltage and current: better than 200 ppm/°C.
Stability	Less than 0.1% per 8 hours after 0.5-hour warm-up.
Voltage/current indication	0 to +10 V; accuracy 1% at rated output.
Dimensions	W 112.4 × H 67 × D 210 mm.
High-voltage cable	Standard 2 m, non-detachable.
Input/output connector	DB15 includes control and indication signals.
Remote output voltage control	External potentiometer and internal +10 V reference provide remote output-voltage control.
Remote output current control	External potentiometer and internal +10 V reference provide remote output-current control.
Remote voltage/current indication	DB15 provides 0 to +10 V voltage/current signals for external digital or analog meters.
Weight	Approximately 1.8 kg.

Model Selection (Customizable)

Output kV	Output mA	Positive model	Negative model
5	10	osi1627P5-50	osi1627N5-50
5	24	osi1627P5-120	osi1627N5-120
8	6.25	osi1627P8-50	osi1627N8-50
10	12	osi1627P10-120	osi1627N10-120
30	2	osi1627P30-60	osi1627N30-60
30	4	osi1627P30-120	osi1627N30-120

220 V AC Power Connector

Pin	Signal
1	Line
2	Earth
3	Neutral

DB15 Connector Signal Definitions

Pin	Signal
1	+10 V reference
2	Voltage setting input
3	Voltage setting output
4	Current setting input
5	Current setting output
6	Voltage monitor
7	Current monitor
8	Ground
9	+5 V
10	Ground
11	+15 V
12	Fault indication
13	Ground
14	Ground
15	High-voltage switching control
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Typical Applications

Electrostatic dust removal; oil-fume purification; capacitor charging/discharging; electrostatic and negative-ion generators; X-ray tubes; laser power supplies; nonwoven production and related applications.

Dimensions





