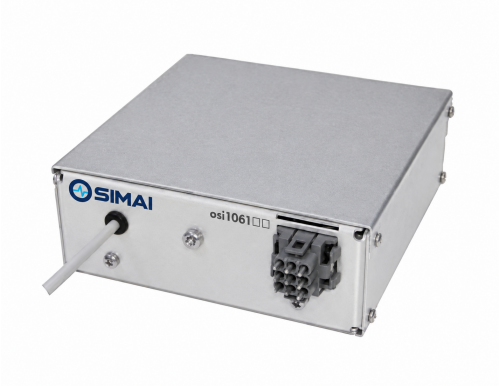
osi1621 Series

30 kV; 30 W; voltage and current programming from zero to rated output



Product Introduction

The osi1621 series is an efficient, compact, low-ripple modular high-voltage power supply. Output voltage and current are controllable over the entire operating range. A 0–10 V control signal adjusts the output from 0 V to the maximum output voltage.

Product Features

- Voltage and current programming from zero to rated output
- Output current and voltage test points
- Output controlled by an ON/OFF signal
- Overvoltage protection
- Compact size
- OEM customization available

Specifications

Parameter	Description
Input	+24 VDC ±10%, 2 A.
Output	Eight models from 1 kV to 30 kV; each available with positive or negative output polarity.
Voltage regulation	Load: ≤0.02%, no load to rated load. Line: ≤0.01% for ±10% input-voltage change.
Current regulation	Load: ≤0.02%, rated load to short circuit. Line: ≤0.01% for ±10% input-voltage change.
Ripple	Better than 0.1% peak-to-peak at rated output.
Stability	0.02% per 8 hours after a 0.5-hour warm-up.
Temperature coefficient	Voltage and current: better than 100 ppm/°C.
Voltage test point	10 V ±2% = maximum rated output.
Current test point	10 V ±2% = maximum rated output.
Remote start	>3.4 V = high voltage ON; <1.0 V or open circuit = high voltage OFF.
Dimensions	W 145 × H 51 × D 145 mm.
Weight	Approximately 1 kg.
Input connector	Mating connector and pins supplied.
High-voltage cable	Standard high-voltage cable.

Model Selection (Customizable)

Output kV	Output mA	Positive model	Negative model
1	30	osi1621P1-30	osi1621N1-30
3	10	osi1621P3-30	osi1621N3-30
5	6	osi1621P5-30	osi1621N5-30
10	3	osi1621P10-30	osi1621N10-30
15	2	osi1621P15-30	osi1621N15-30
20	1.5	osi1621P20-30	osi1621N20-30
25	1.2	osi1621P25-30	osi1621N25-30
30	1	osi1621P30-30	osi1621N30-30

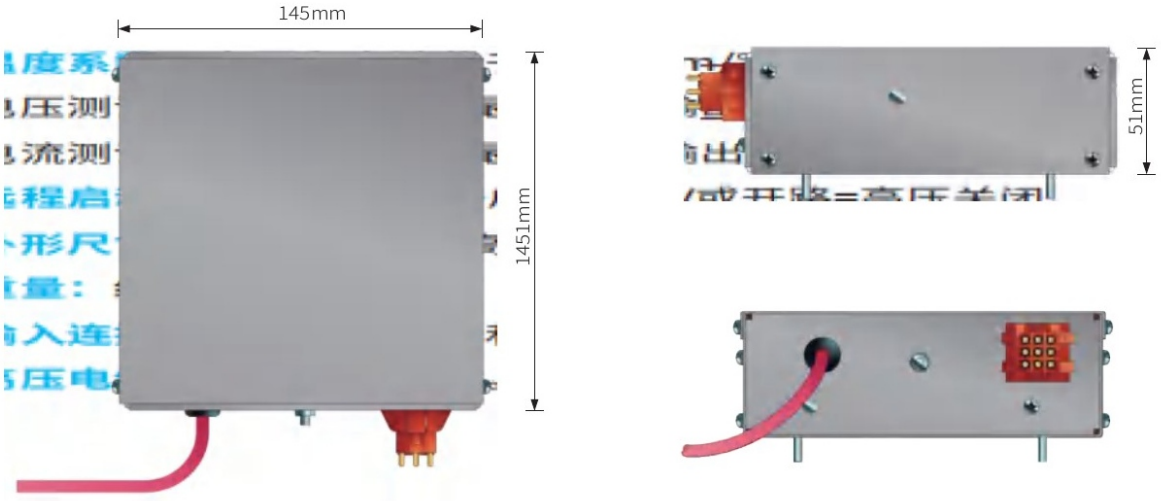
DB9 Connector Signal Definitions

Pin	Signal	Description
1	Power ground	Power ground
2	+24 VDC	+24 VDC; maximum 1.85 A
3	High voltage ON/OFF	0 VDC = high voltage OFF; +5 VDC = high voltage ON (see manual for details)
4	Voltage test point	0–10 VDC = 0–100% rated output; Zout = 10 kΩ
5	Current test point	0–10 VDC = 0–100% rated output; Zout = 10 kΩ
6	Power supply programming	0–10 VDC = 0–100% rated output; Zin = 10 MΩ
7	Current programming	0–10 VDC = 0–100% rated output; Zin = 10 MΩ
8	+10 VDC reference	+10 VDC; maximum 1 mA
9	Signal ground	Signal ground

Typical Applications

Electrophoresis; photomultiplier tubes; electron beams; laboratory applications; ion sources; electrospinning.

Dimensions



Source overlapping labels retained.

Stability: 0.02% per 8 hours after a 0.5-hour warm-up. Temperature coefficient: voltage and current better than 100 ppm/°C. Voltage and current test points: 10 V ±2% represents maximum rated output. Remote start: >3.4 V = high voltage ON; <1.0 V or open circuit = OFF. Dimensions: W 145 × H 51 × D 145 mm. Weight: approximately 1 kg. Mating input connector and pins supplied. Standard high-voltage cable.