osi1623 Series

60 kV; 60 W; low stored energy; output current and voltage test points



Product Introduction

The OSIMAI osi1623 high-voltage power supply supports high-voltage insulation testing, detector arrays, electrophoresis and cable-testing equipment. Automatic crossover between voltage and current regulation suits variable-load applications. Arc and short-circuit protection and destructive testing allow operation in extremely harsh environments.

Product Features

- Selectable output voltages from 1 kV to 60 kV
- Output current and voltage test points
- Output enable/disable control
- Arc and short-circuit protection
- Low stored energy
- OEM customization available

Specifications

Parameter	Description
Input	+24 VDC ±10%, 4.0 A.
Output	Ten models from 1 kV to 60 kV; positive or negative single-polarity output.
Efficiency	≤85%.
Voltage regulation	Load: 0.01% of output voltage from no load to full load. Line: ±0.01% for ±10% input-voltage variation.
Current regulation	Load: 0.1% of output current as voltage varies from zero to rated voltage. Line: 0.05% of rated current over specified input range.
Stability	Less than 0.02% per 8 hours after 0.5-hour warm-up.
Temperature coefficient	Voltage and current: better than 100 ppm/°C.
Ripple	Better than 0.1% rms at rated output.
Ambient temperature	Operating: 0–40°C. Storage: −40–85°C.
Humidity	0–90%, non-condensing.
Dimensions	W 127 × H 76 × D 230 mm.
Weight	2.38 kg.
Input connector	12-pin AMP Metri-Mate; mating connector and pins supplied.
Output cable	Non-detachable.
Front-panel ground connector	8-32 threaded grounding stud; nut supplied.

Model Selection (Customizable)

Output kV	Output mA	Positive model	Negative model
1	60	osi1623P1-60	osi1623N1-60
3	20	osi1623P3-60	osi1623N3-60
5	12	osi1623P5-60	osi1623N5-60
10	6	osi1623P10-60	osi1623N10-60
15	4	osi1623P15-60	osi1623N15-60
20	3	osi1623P20-60	osi1623N20-60
30	2	osi1623P30-60	osi1623N30-60
40	1.5	osi1623P40-60	osi1623N40-60
50	1.2	osi1623P50-60	osi1623N50-60
60	1	osi1623P60-60	osi1623N60-60

Power Supply Pin Definitions

Pin	Signal	Description
1	Power ground	+24 VDC return
2	+24 VDC input	+24 VDC; maximum 3.5 A
3	High voltage enable/disable	Open = high voltage OFF; ground = high voltage ON
4	Voltage test point	0–10 VDC = 0–100% rated output
5	Current test point	0–10 VDC = 0–100% rated output
6	Voltage programming	0–10 VDC = 0–100% rated output
7	Current programming	0–10 VDC = 0–100% rated output
8	+10 VDC reference	+10 VDC; maximum 1 mA
9	Signal ground	Signal ground
10	NC	/
11	NC	/
12	NC	/

Typical Applications

Electrospinning; high-voltage insulation testing; detector arrays; electrophoresis; cable testing.

Dimensions





