osi1619 Series

1 kV; 15 W; high stability; low ripple



Product Introduction

The OSIMAI osi1619PN1-15 is a high-performance DC–DC converter with well-regulated output. It provides a floating 1 kV, 15 mA output over a 300–1000 V operating range. The isolated positive- or negative-polarity output is ideal for mass-spectrometry detectors including electron multipliers (EM), microchannel plate detectors (MCP), and channel electron multipliers. The module is enclosed in a shielded metal case and provides high-voltage output through two fixed cables. Remote voltage programming and voltage monitoring are provided, and a TTL-compatible enable signal controls the high-voltage output.

Product Features

- High stability
- Good regulation; low ripple
- Analog control, remote/local
- Voltage monitoring
- Compact design
- Floating programmable output

Specifications

Parameter	Description
Input voltage	24 VDC ±0.5 V.
Input current	Maximum 1.2 A.
Polarity	Positive or negative.
Output voltage	Continuously adjustable from 300 V to 1 kV over the entire output range.
Load current	Maximum 15 mA over the full voltage range.
Power	Maximum 15 W over the full voltage range at full load.
Voltage regulation	Load: ≤1%, no load to rated load.
Current regulation	Load: ≤1%, no load to rated load.
Ripple	Minimum 0.2% peak-to-peak at rated output voltage.
Temperature coefficient	Voltage and current: better than 300 ppm/°C.
Stability	Less than 0.1% per 8 hours after a 1-hour warm-up.
Ambient temperature	Operating: 0 to +40°C. Storage: −40 to +85°C.
Humidity	20–85% RH, non-condensing.
Cooling	Convection cooling.
Interface / power connector	9-pin male D connector.
High-voltage cable	750 mm flying leads; coaxial high-voltage cable.
Voltage programming	0–10 V represents 0–100% rated output voltage.
Voltage monitoring	0–10 V represents 0–100% rated output voltage.
Dimensions	W 104 × H 38 × D 171 mm.
Weight	Approximately 0.6 kg.

Model Selection (Customizable)

Output kV	Output mA	Positive model	Negative model
1	15	osi1619PN1-15	osi1619PN1-15

DB9 Connector Signal Definitions

Pins	Signal
1, 7, 8, 9	0 V
2	V.Control+
3, 4	+24 V
5	V.Monitor
6	V.Control−

Typical Applications

Mass-spectrometry detectors; microchannel-plate detectors; electron multipliers; channel electron multipliers.

Dimensions



