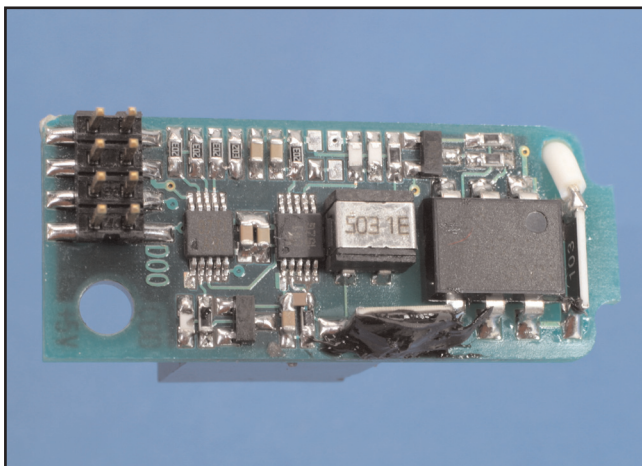


Modular High-Voltage Conditioned Power Supply

Fact Sheet

Sandia has developed a miniature system that offers a turn-key solution to high-voltage power supply needs. Roughly a cubic inch in size, this modular component available for commercialization features a regulated voltage output, the ability to source or sink current at any set voltage, current monitoring, and electronic float. It can operate in constant voltage mode, or will support constant current through external control software. It's low-noise and stable. It is ideal for uses that require regulated voltage, current monitoring and the capability to allow floating circuits by isolating outputs — features that cannot be obtained elsewhere.



Modular high voltage power supply

FEATURES

- Sources and sinks current at set voltage
- Small Size
- Multiple versions: 1kV, -1 kV, +5kV, -5 kV
- Regulated voltage 0 to max
- Current monitor output
- On-board general purpose I²C memory for ID, offsets, etc.
- 0.5W output
- Modular design with common form factor and electrical interface
- Low power, 5.3V supply 50mA@1kV
250mA@5kV
- Low cost
- Electrical float
- Voltage monitor output

APPLICATIONS

- Electrokinetic and electrophoretic transport
- Microfluidics and micro separators
- Photomultiplier tube power supplies for fast gain response
- Drift tube power supplies
- Field emissions sources
- Electron optics
- Use two in combination for bipolar voltage output

Modular high voltage power supply

SPECIFICATIONS

Dimensions: 1.45" × 0.60" × 0.80"
Float current: +/- 100 μ A
Offset error: 3V typical
Output connection: Shrouded D-sub socket on flexible HV silicone wire, easy to change

Connector Interface (Molex #87267-0850)	
Pin	Function
1	Current monitor output
2	Voltage monitor output
3	Set voltage input
4	Reference voltage input (4.096V)
5	Supply voltage input (+5.3V)
6	GND
7	I ² C data
8	I ² C clock

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