

TMI6100 Series Modular High-Voltage Power Supply

1kV, 15W, High Stability, Low Ripple



Teslaman TMI6100PN1-15It is a high-efficiency DC-DC output adjustable converter. The converter provides Floating output 1kV @ 15mA respect to the ground, the operational voltage range is 300V-1000V. Positive or negative polarity output, and isolated, It is very suitable for use as a detector in mass spectrometry analysis, for example: electronic multiplier (EM), microchannel board detector (MCP) and channel electronic multiplier. The module is packaged in a shielded metal shell to provide high-voltage output through two fixed cables. In addition, the power supply also has remote voltage programming and voltage monitoring functions, and can be passed through TTL Compatible enabling signal to achieve high-voltage output control.

- High stability
- Good adjustment, low ripple
- Analog control(Long-distance/locality)
- Voltage monitoring
- Compact Design
- Floating ground, programmable output

Typical applications:

Mass spectrometry analysis detector;
Microchannel board detector;
Electronic multiplier;
Channel electronic multiplier;

Specifications:

Input Voltage: DC24V±0.5V。

Input current: Max 1.2A

Polarity: Positive polarity or negative polarity

Output voltage: 300V to 1kV Continuous adjustable

Load current: Max.15mA (Full voltage range)

Power:

Max 15W (Full voltage range at full load)

Voltage adjustment rate:

Load regulation: ≤ 1% (No load to rated load)

Current adjustment rate:

Load regulation: ≤ 1% (No load to rated load)

Ripple:

The smallest ripple is 0.2% p-p, under rated output voltage. **Temperature coefficient:**≤300ppm/°C。

Stability: Less than 0.1% every 8 hours after 1 hour warm-up.

Ambient temperature:

Operational: 0°C to+40°C

When storing:-40°C to +85°C。

Humidity: 20% to 85%Relative humidity, no condensation.

Cooling: Convection cooling.

Port/Power connector:

9 PIN male D-Type connector

High-voltage cable:

750mmSuspended lead, Coaxial high-voltage cable

Voltage programming:

0 to 10V Match 0 to100% Rated output voltage

Voltage monitoring:

0 to 10V Match 0 to 100% Rated output voltage

Dimension: wide104mm, high38mm, deep171mm。

Weight:600g

TMI6100Power supply model selection table (customizable):

Rated Output Value		Power supply model	
kV	mA	Positive polarity	Negativepolarity
1	15	TMI6100PN1-15	TMI6100PN1-15

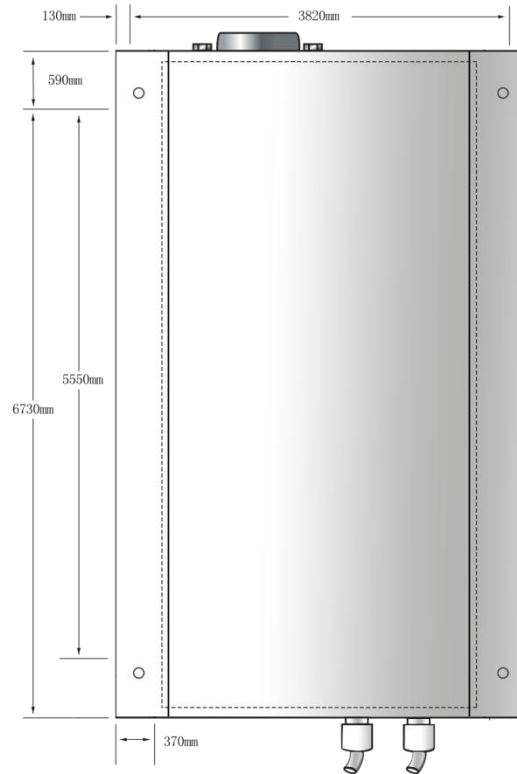
Analog interface—9 PIN Male D-Type Connector:

Pins	Signal description
1、 7、 8、 9	0V
2	V.Control+
3、 4	+24V
5	V.Monitor
6	V.Control-

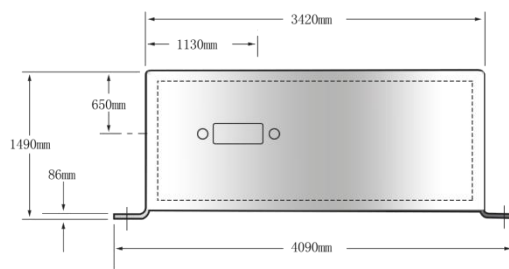
External dimensions: Millimetre



Front View



Top View



Back View