

TPS7070 Series High precision DC high voltage power supply



5kV, 1kW, ripple < 10ppm, stability < 10ppm.

Teslaman TPS7070 series is a 19" standard rack high voltage power supply with low ripple, high stability and high precision. After 8 hours of long-term testing, the ripple is less than 10ppm (measured 25mV) and the stability is better than 10ppm. At low power ($\leq 200W$), the ripple is less than 1ppm. Higher parameter index requirements can be customized.

- Output voltage 5kV
- Output power 1kW
- The ripple is less than 10ppm.
- Stability is better than 10ppm
- Over-voltage, over-current, short circuit, arc and over-temperature protection
- Higher index requirements can be customized.

Typical application:

Semiconductor testing; Material analysis; Electrostatic application; Electron microscope; Scientific research.

Specification:

Input: AC 220V 10%, 50/60Hz, 10A.

Output: output voltage 5kV, output power 1kW. 0 to the highest voltage continuously adjustable, output negative polarity.

Front panel status indication:

High voltage on and off, voltage and current display, constant voltage and constant current working mode display.

Voltage control:

The power supply comes with a rotary encoder that can set the output voltage between 0 and the highest voltage.

External analog control: The external control signal from 0 to 10V can adjust the output from 0 to the highest output voltage.

Digital communication control: the output can be adjusted from 0 to the highest voltage through RS-485 communication interface according to standard Modbus communication protocol.

Current control:

The power supply comes with a rotary encoder that can set the output current between 0 and the highest current.

External analog control: The external control signal from 0 to 10V can adjust the output from 0 to the maximum current.

Digital communication control: the output can be adjusted from 0 to the maximum current through RS-485 communication interface according to standard Modbus communication protocol.

Voltage regulation rate:

Relative load: 0.01% (no load to rated load).

Relative input: 0.01% (input voltage changes by 10%).

Current regulation rate:

Relative load: 0.01% (no load to rated load).

Relative input: 0.01% (input voltage changes by 10%).

Ripple voltage:

Under the rated output condition, the peak-to-peak value of ripple voltage is 10ppm.

Ambient temperature:

Working time: 0°C to +50°C. Storage: -20°C to +80°C.

Stability: 10ppm.

Temperature coefficient: 10ppm.

Humidity: 10-90% non condensation.

Voltage and current indication:

Four-position LED digital tube with accuracy of 1% under rated output conditions.

Overall dimensions:

482mm wide, 178mm high and 660mm deep.

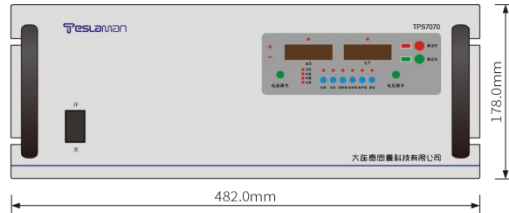
High-voltage output line: the power supply comes with shielded coaxial cable, which is 2 meters long and cannot be plugged in.

Weight: 10 to 20kg.

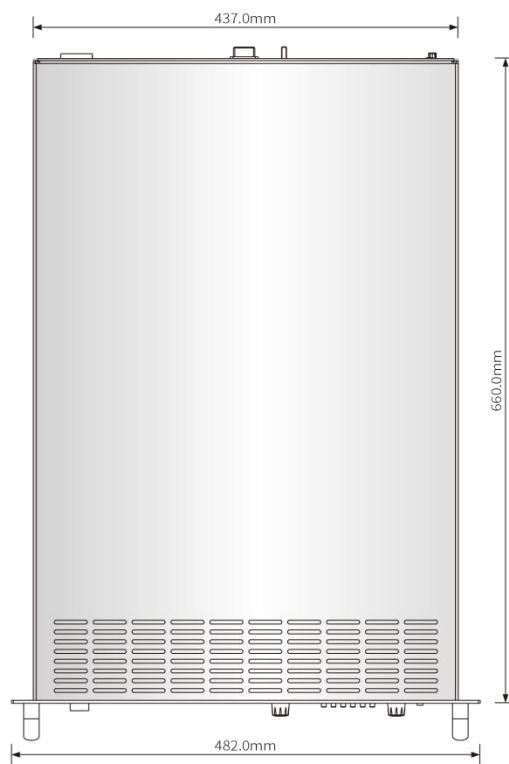
Power input terminal J1:

Pin	Signal	Description
1	L	Live Wire
2	N	Neutral Wire
3	G	Ground Wire

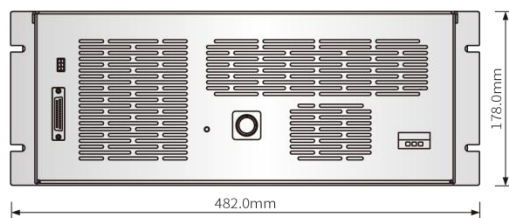
Overall dimensions: mm



Front view



Top View



Rear View