TPS7071 series High-precision DC high-voltage power supply



5kV, 2kW, ripple <10ppm, stability <10ppm

Teslaman TPS7071 series is a 19" standard rack-mounted high-type 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 indicators are required to be customized.

- Output voltage 5kV
- Output power 2kW
- Ripple is less than 10ppm
- Stability is better than 10ppm
- Overvoltage, overcurrent, short circuit, arc and overtemperature protection
- Higher indicators require customization

Typical applications:

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

Specifications:

Input:AC220V±10%, 50/60Hz, 10A.

Output:Output voltage 5kV, output power2kW. 0 to the highest voltage is continuously adjustable, and the output negative polarity.

Front panel status instructions:

High voltage on, high voltage off, voltage and current display, constant voltage and constant current 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 0 to 10V control signal can adjust the output from 0 to the maximum output voltage.

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

Current control:

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

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

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

Voltage adjustment rate:

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

Relative input: $\pm 0.01\%$ (input voltage change is $\pm 10\%$).

Current adjustment rate:

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

Relative input: $\pm 0.01\%$ (input voltage change is $\pm 10\%$).

Ripple voltage:

Under rated output conditions, it is better than 10ppm (p-p).

Ambient temperature:

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

Stability:0.5 hours after booting, less than 0.1% every 8 hours.

Temperature coefficient: Voltage and current are better than 100ppm/°C.

Humidity:10-90% without condensation.

Voltage and current indication:

Four-bit LED digital tube with $\pm 1\%$ accuracy under rated output conditions.

External dimensions:

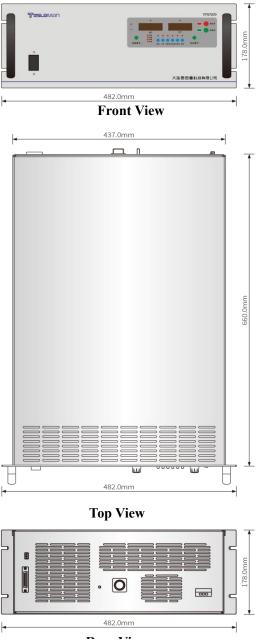
482mm wide, 178mm high and 660mm deep.

High-voltage output line: Power supply comes with shielded coaxial cable, wire length2 meters, non-detachable **Weight:**10 to 20kg.

Power input terminal J1:

Foot position	Signal	Explain
1	L	Live
2	Ν	Neutral
3	G	Ground

External dimensions: mm



Rear View