

TEPM6070 Series Modular High Voltage Power Supply

**30kV, 30W, Voltage and Current Programmed
From Zero to Rated Output**



Teslaman TEPM6070 Series High Voltage Power Supply is a high efficiency, compact, low ripple modular high voltage power supply. The output voltage and current are controllable in the whole operating range. The 0-10V control signal can adjust the output from 0V to the highest output voltage.

- Voltage and Current Programmed From Zero to Rated Output
- Test Points for Output Current and Voltage
- Over-Voltage Protection
- Control the Output By Opening/Closing Signals
- Compact Dimensions
- Provide OEM Customization

Typical Application:

Electrophoresis; Photomultiplier tube; Electron beam;
Experimental application; Ion source; Electrostatic spinning.

Specifications:

Input: + 24VDC \pm 10%, 2A.

Output: There are 8 models from 1kV to 30kV. Each model can choose positive or negative polarity output.

Voltage Regulation:

Load: \leq 0.02% (no load to rated load).

Input: \leq 0.01% (when the input voltage changes by 10%).

Current Regulation:

Load: \leq 0.02% (rated load to short circuit).

Input: \leq 0.01% (when the input voltage changes by 10%).

Ripple: 0.1% Vp-p of rated output voltage.

Dimensions: 14.5 mm wide, 5.1 mm high and 14.5 mm deep.

Weight: About 1kg.

Input Connectors: Matching connectors and pins are provided.

Output Line: standard high voltage cable.

Voltage stability: 0.02% every 8 hours after starting up for 0.5 hours.

Voltage Temperature Coefficient: 0.01% per degree Celsius.

Voltage test point: 10V \pm 2% = maximum rated output.

Current test point: 10V \pm 2% = maximum rated output.

Remote Startup:

> 3.4 V = high pressure opening. < 1.0 V or open circuit = high voltage closed.

**EPM6070 Series High Voltage Power Supply
Model Selection Table (Customizable):**

Output Rating		Type of Power Supply	
kV	mA	Positive Polarity	Negative Polarity
1	30	TEPM6070P1-30	TEPM6070N1-30
3	10	TEPM6070P3-30	TEPM6070N3-30
5	6	TEPM6070P5-30	TEPM6070N5-30
10	3	TEPM6070P10-30	TEPM6070N10-30
15	2	TEPM6070P15-30	TEPM6070N15-30
20	1.5	TEPM6070P20-30	TEPM6070N20-30
25	1.2	TEPM6070P25-30	TEPM6070N25-30
30	1	TEPM6070P30-30	TEPM6070N30-30

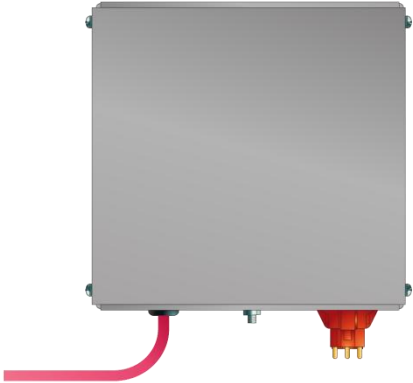
Input-connector 9 pins:

Stitch	Signal	Description
1	Power Source Ground	Power source ground
2	+ 24VDC	+ 24VDC, max 1.85 A
3	High Pressure Opening/Closing	0VDC = high pressure shut down, + 5VDC = high pressure open. (See the manual for details.)
4	Voltage Test Point	0 to 10VDC = 0 to 100% output rating, Zout = 10 k Ω.
5	Current Test Point	0 to 10VDC = 0 to 100% output rating, Zout = 10 k Ω.
6	Power Programming	0 to 10VDC = 0 to 100% rated output, Zin = 10 M Ω.
7	Current Programming	0 to 10VDC = 0 to 100% rated output, Zin = 10 M Ω.
8	+ 10VDC Reference	+ 10VDC, max 1mA
9	Signal Ground	Signal ground

Overall Dimensions: 145 mm wide, 51 mm high and 145 mm deep



Front View



Top View



Side View