TMPS6065 Series

Module high-voltage power supply | 1kV~10kV, 10W High Stability, Low Ripple

- Output voltage 10kV
- Output power 10W
- Analog control interface
- Voltage and current monitoring
- High stability
- Low ripple and noise
- Compact design

Product Introduction:

Teslaman TMPS6065 series is a 10W high-voltage DC power supply with a modular structure and a maximum output voltage 10kV. It is a low noise, high efficiency, compact model, low ripple and high stability. Remote user control adjustment is provided through the 15-pin D-type connector interface. Compact and lightweight, the output polarity is optional.

Typical Applications:

Electrostatic Chuck,Photomultiplier tube; electrostatic printing; electron beam and ion beam; electron multiplier tube detector; mass spectrometry analysis; microchannel board detector; electrostatic lens; atomic energy instrument,Al Visual Recognition.

Optional Functions:

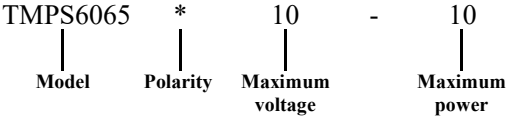
Variable current control
High stability
OEM Customization available.

Specification Description:

Input Voltage	+24VDC, ±2VDC.
Input current	Maximum 1A.
Output Voltage	1kV to10kV is optional.
Output Polarity	Specify positive or negative polarity when ordering.
Power	The maximum is 10W.
Voltage Regulation	Input adjustment rate: in the specified input voltage range, rated output voltage, less than 10ppm. Load adjustment rate: full load change, under rated output voltage, better than 40ppm.
Ripple	Under the rated output conditions, it is better than 10ppm (p-p).
Stability	After one hour of preheating, it is better than 7 per hour.0ppm, better than 3 every 8 hours00ppm.
Protection Function	Overvoltage, overcurrent, arc and short circuit protection.
Temperature Coefficient	Voltage and current, better than 50ppm/℃.
Environmental	Working hours: 0℃Up to 60℃. Storage time: -20℃Up to 80℃.
Humidity	10% to 90% relative humidity, no condensation.
Cooling	Convection cooling.
Dimensions	Width 70mm, height 30mm, depth 130mm.
Weight	About 490 grams.
Interface Connector	15-pin male D-type connector.
Grounding Method	Ground to case.
Output Connection Method	Provide one meter long fixed high-voltage cable with a shielding layer.

Description of Model Code

The model code represents the performance and parameters of the power supply, which are:
Maximum output voltage in kV;
Maximum output power in W;
Output polarity, P for positive output, N for negative output;



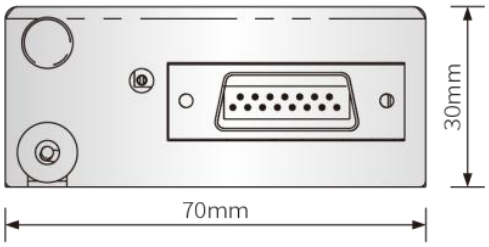
TMPS6065 Series High Voltage Power Supply Model Selection Table (Customizable):

Output Rating		Model of Power Supply	
kV	mA	Positive Polarity	Negative Polarity
1	10	TMPS6065P1-10	TMPS6065N1-10
2	5	TMPS6065P2-10	TMPS6065N2-10
2.5	4	TMPS6065P2.5-10	TMPS6065N2.5-10
3	3.3	TMPS6065P3-10	TMPS6065N3-10
5	2	TMPS6065P5-10	TMPS6065N5-10
10	1	TMPS6065P10-10	TMPS6065N10-10

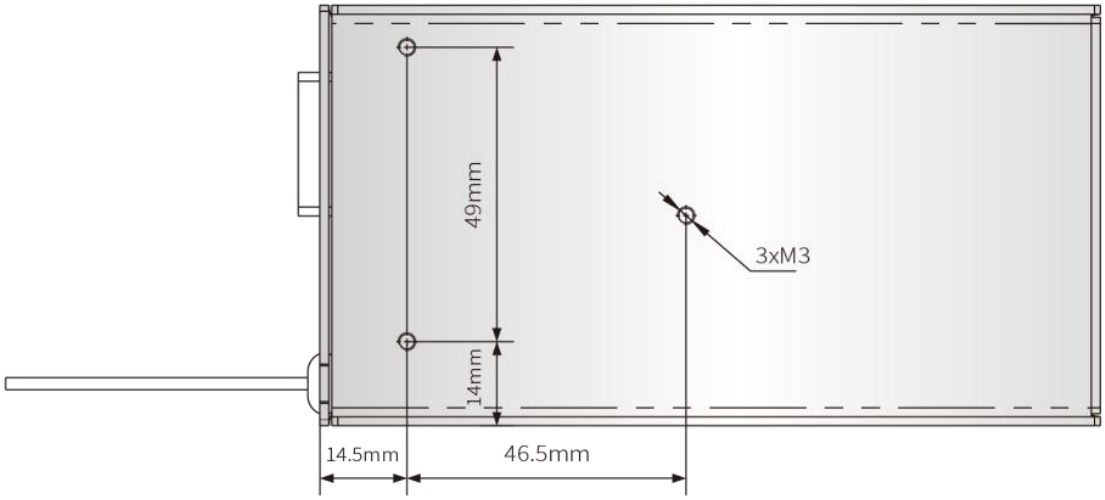
TMPS6065 Power Supply DB15 Connector signal definition J3:

Pin	Signal	Description
1	Power supply ground	GND (also used as an analog signal)
2	24V	+24Vdc,1A (maximum)
3	Voltage monitoring output	0 to 10V = 0 to 100% rated output
4	Local programming	Potentiometer connected to +10Vdc and ground.Potentiometer sliding output provided 0-10V adjustable voltage output.
5	Voltage programming input	0 to 10V = 0 to 100% rated output ±2%, Zin = 10MΩ
6	Voltage programming differential output (temporarily unavailable)	0 to 10V = 0 to 100% rated output ±2%, Zin = 10MΩ
7	Voltage programming differential input - positive (temporarily unavailable)	0 to 10V difference between pin7 and pin9 = 0-100% rated output, diode clamp grounding, Zin = 38kΩ
8	Current monitoring output	0 to 10V = 0 to 115% of rated output
9	Voltage programming differential input - negative (temporarily unavailable)	0 to10V difference between 7 pins and 9 pins = 0-100% rated output, diode clamp grounding, Zin = 38kΩ
10	NC	NC
11	Current programming transmission （optional）	(Only the VCC option is available) 0 to 10V = 0 to 100% of rated output ±2%, Zin = 10MΩ
12	HV Output	Low level = On, TTL, CMOS, collector = open circuit.
13	NC1	NC
14	NC2	+10V ultra-high stability reference output
15	Analog signal ground	Analog signal ground

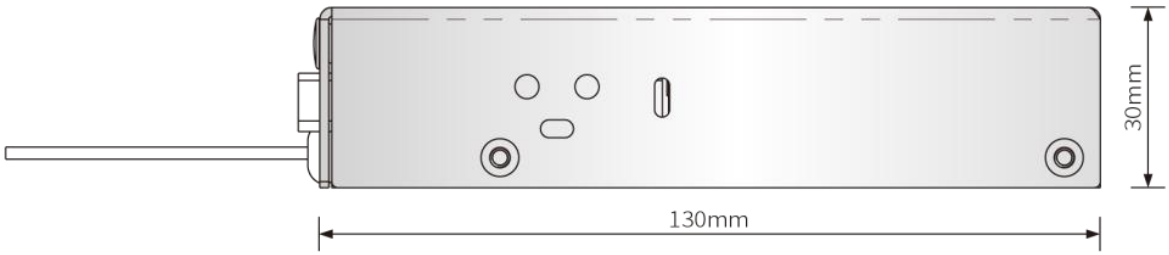
Dimensions: mm



Front View



Bottom View



Side View