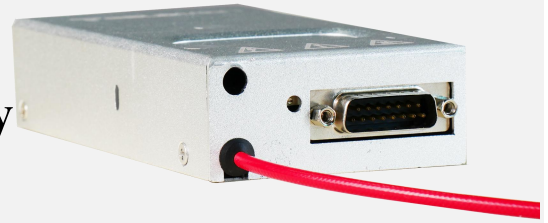


TMPS6065Series

Module high-voltage power supply

1kV~10kV, 10W High Stability, Low Ripple



Teslaman TMPS6065 series is a 10W high-voltage DC power supply with a modular structure and a maximum output voltage 10kV, the maximum output current is 2mA. 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.

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

Typical Applications:

Photomultiplier tube; electrostatic printing; electron beam and ion beam; electron multiplier tube detector; mass spectrometry analysis; microchannel board detector; electrostatic lens; atomic energy instrument.

Optional Functions:

Variable current control
High stability
OEM Customization available.

Specifications:

Input Voltage:

+24VDC, ±2VDC.

Input current:

Maximum 1A.

Output Voltage:

1kV to 10kV 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 hours 00ppm.

Protection Function:

Overvoltage, overcurrent, arc and short circuit protection.

Temperature Coefficient:

Voltage and current, better than 50ppm/°C.

Environmental:

Working hours: 0°C Up to 60°C.

Storage time: -20°C Up to 80°C.

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.

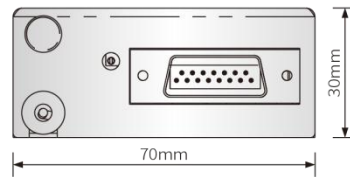
Output Connection Method:

Provide one meter long fixed high-voltage cable with a shielding layer.

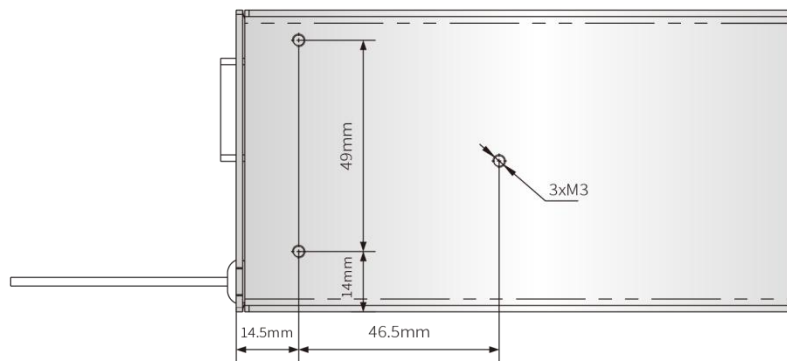
TMPS6065 Power Supply DB15 Connector signal definition J3:

Pins	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 $\pm 2\%$, $Z_{in} = 10M\Omega$
6	Voltage programming differential output (temporarily unavailable)	0 to 10V = 0 to 100% rated output $\pm 2\%$, $Z_{in} = 10M\Omega$
7	Voltage programming differential input - positive (temporarily unavailable)	0 to 10V difference between pin7 and pin9 = 0-100% rated output, diode clamp grounding, $Z_{in} = 38k\Omega$
8	Current monitoring output	0 to 10V = 0 to 115% of rated output
9	Voltage programming differential input - negative (temporarily unavailable)	0 to 10V difference between 7 pins and 9 pins = 0-100% rated output, diode clamp grounding, $Z_{in} = 38k\Omega$
10	NC	NC
11	Current programming transmission (optional)	(Only the VCC option is available) 0 to 10V = 0 to 100% of rated output $\pm 2\%$, $Z_{in} = 10M\Omega$
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

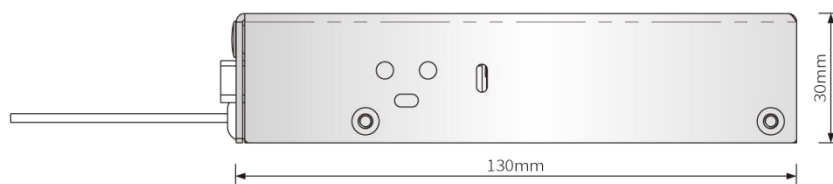
Dimensions: mm



Front View



Bottom View



Side View