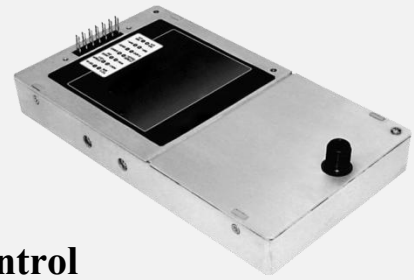


TUMW6080 Series

Modular High Voltage Power Supply

8kV-20kV, 60W/125W, Voltage/

Current Regulation Through Automatic Cross Control



Teslaman TUMW6080's high voltage module provides users with a combination of shape, mounting and function, which can replace the power supply currently used in the market, and has more functions and competitive price. Better performance, more convenient integration with the system and lower price.

- Voltage range from 8kV to 20kV
- The output power 60W or 125W Operational
- Voltage/Current Regulation Through Automatic Crossover Control
- Voltage and Current Monitoring Signal
- Arc and Short Circuit Protection

Specifications:

Input Voltage: 24VDC.

Standard Voltage Range: 23VDC to 30VDC.

Non-standard Voltage Range: 11VDC to 30VDC.

Input Current: (Typical)

Disabled: < 40mA.

No load: < 600mA.

Full load:

60W power supply: 3A.

125W power supply: 6.2 A.

Voltage Regulation:

Input: < 0.01%.

Load: < 0.01%.

Current Regulation:

Input: < 0.01%.

Load: < 0.01%.

Stability:

After starting up for 0.5 hours, it is 0.01% every 8 hours and 0.02% every day.

Accuracy:

Except for the current sensor at 10%, all programming and monitoring at 2%.

Temperature Coefficient: (typical)

100ppm/°C.

Overshoot: < 0.1% Vp.

Environment:

Temperature range:

Operating temperature: 0 ° C to 65 ° C, enclosure temperature.

Storage temperature:-55 ° C to 85 ° C, non-operating.

Humidity: 10% to 90%, no condensation.

Dimensions: 114mm wide, 27mm high and 203mm deep.

Weight: 0.79 kg.

TUMW6080 Series High Voltage Power Supply Model Selection Table (Customizable):

Output Rating		Type of Power Supply	
kV	mA	Positive polarity	Negative polarity
8	15.625	TUMW6080P8-125	TUMW6080N8-125
10	12.5	TUMW6080P10-125	TUMW6080N10-125
20	6.25	TUMW6080P20-125	TUMW6080N20-125

Standard interface:

Pin	Signal	Description
1	Ground Return of Power Supply	Ground return of + 24VDC power supply
2	+ Power Input	+ 24VDC Power Input
3	Current Sensor	See the current sensor text and table for details
4	Enable Input	Low (< 0.7 V, Isink, 1mA) = high voltage off, high (open or > 2V) = high voltage on
5	Signal Ground	Signal ground
6	Remote Voltage Regulation	0 to +4.64 VDC = 0 to 100%, $Z_{in} > 1 \text{ M } \Omega$.
7	+ 5V Reference Output	+ 5VDC \pm 2%, $Z_{out} = 475 \text{ } \Omega$
8	Ground Return of Power Supply	Ground return of + 24VDC power supply
9	+ Power Input	+ 24VDC Power Input
10	Characteristic Resistance	Unique identification resistor connected to ground
11	Remote Current Regulation	0 to +4.64 VDC = 0 to 100%, $Z_{in} > 1 \text{ M } \Omega$. Keep open circuit to achieve preset current limit, 103% of rated output current
12	Current Monitoring	0 to + 5VDC = 0 to 107.5%, $Z_{out} < 10\text{k } \Omega$
13	Voltage Monitoring	0 to + 5VDC = 0 to 107.5%, $Z_{out} < 10\text{k } \Omega$
14	E Output Monitoring	1.00 V, 1G Ω /1.1 M Ω voltage divider, using 10 M Ω meter.

Legacy interface (L option):

Pin	Signal	Description
1	Ground Return of Power Supply	Ground return of + 24VDC power supply
2	+ Power Input	+ 24VDC Power Input
3	Current Sensor	See the current sensor text and table for details
4	Enable Input	Low (< 0.7 V, Isink, 1mA) = high voltage off, high (open or > 2V) = high voltage on
5	Signal Ground	Signal ground
6	Remote Adjustment	Positive power supply: 0 to +4.64 VDC = 0 to 100% rated voltage, $Z_{in} > 1 \text{ M } \Omega$. Negative power supply: + 5VDC to 0.36 VDC = 0 to 100% rated voltage, $Z_{in} > 1 \text{ M } \Omega$.
7	+ 5V Reference Output	+ 5VDC \pm 2%, $Z_{out} = 475 \text{ } \Omega$.
8	Ground Return of Power Supply	Ground return of + 24VDC power supply
9	+ Power Input	+ 24VDC Power Input
10	Characteristic Resistance	Unique identification resistor connected to ground
11	N/C	
12	N/C	
13	N/C	
14	E Output Monitoring	1.00 V/kV, 1G Ω /1.1 M Ω voltage divider, using 10 M Ω meter.

Overall Dimensions: mm

15kV

20kV

