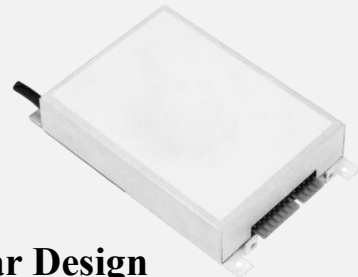


TPMT6055 Series Modular High Voltage Power Supply

500V to 7.5 kV, 1.875 W to 4W, Low-cost Modular Design



Teslaman TPMT6055 modular high voltage power supply provides good regulation capability and fixed polarity output. These fully packaged modules are specially designed to provide extremely low ripple and noise.

The output voltage can be controlled locally or remotely. In addition, a ground reference output voltage monitoring signal is provided. TPMT6055 can be powered by a positive voltage source or a positive and negative voltage source, which improves the flexibility of application.

- 500V to 7.5 kV, 1.875 W to 4W
- Low-cost Modular Design
- Excellent Stability and Regulation
- Low Noise and Low Ripple
- Arc and Short Circuit Protection

Typical Application:

Photomultiplier tube; Ultrasonic transducer; Solid state detector.

Specifications:

Input Voltage:

Options 1: + 24Vdc to + 30Vdc, 400mA.

Option 2: ± 12 Vdc to ± 18 Vdc, 400mA.

Output Polarity: Positive or negative polarity is optional.

Output Voltage: See "Model Selection Table".

Output Current: See "Model Selection Table".

Output Power: 1.875 W, 2W, 2.5 W, 3W, 4W.

Voltage Regulation:

Load: $\leq 0.001\%$ (no load to rated load).

Input: $\leq 0.001\%$ (when the input voltage changes by 10%).

Stability: After preheating for half an hour, less than or equal to 0.005% per hour and 0.02% every 8 hours.

Accuracy: $\pm 2\%$ of remote programming settings, (max +0.5%) Voltage monitoring $\pm 2\%$.

Temperature Coefficient: ≤ 50 ppm/ $^{\circ}$ C.

Arc/short circuit: Arc and short circuit protection, limiting short circuit output current to less than 150% of the maximum rated output current.

Working temperature: 0 $^{\circ}$ C to + 50 $^{\circ}$ C.

Storage temperature: -40 $^{\circ}$ C to + 85 $^{\circ}$ C.

Humidity: 20% to 85% relative humidity, no condensation.

Interface Connector: 12-bit card edge connector, accessories are provided with power supply.

Output Connector: One RG-59B/U stationary 610mm shielded cable is provided.

Cooling: Air cooling.

Dimensions: 98mm wide, 32mm high and 160mm deep.

Weight: About 1kg.

TPMT6055 Series High Voltage Power Supply Model Selection Table (Customizable):

Output Rating		Type of Power Supply	
kV	mA	Positive Polarity	Negative Polarity
1	4	TPMT6055P1-4	TPMT6055N1-4
2	2	TPMT6055P2-4	TPMT6055N2-4
3	1.33	TPMT6055P3-4	TPMT6055N3-4
7.5	0.53	TPMT6055P7.5-4	TPMT6055N7.5-4

Interface connector:

Signal	Parameter	Option 1 Pin code	Option 3 Pin code
+ Power Input	+ 24VDC to + 30VDC or + 12VDC to + 18VDC	3 & 4	3 & 4 & 5
-Power Input	-12Vdc to-18Vdc	N/A	2 & 6
Earthing	Earthing	1 & 12	1 & 12
Voltage Monitoring	See voltage monitoring table	11	11
+ 9Vdc Reference	+9.0 Vdc, maximum 10mA.	10	10
Voltage Programming Input	0 to 9Vdc = 0 to 100% rated output, 100k Ω Zin.	8	8
Local Voltage Programming	Internally programmed potentiometer sliding point, 0 to 9Vdc.	9	9

Overall Dimensions: mm

