



## TSMS6075 Series Modular high voltage power supply

60kV, 60W, low storage energy, output current and voltage test points



- ◆ Output voltage from 1kV to 60kV
- ◆ Arc and short circuit protection
- ◆ Low storage energy
- ◆ Output current and voltage test points
- ◆ Enable/Disable Output Control
- ◆ Provide OEM customization

Teslaman TSMS6075 high voltage power supply is based on a proprietary resonant flyback power conversion topology with efficiency exceeding 80%. Fixed polarity modules (positive or negative polarity specified when ordered) Features: Automatic switching of voltage and current regulation for sensitive load applications. The TSMS6075, with its robust design for arc and short circuit protection, allows it to operate in extremely harsh environments.

### Typical application:

Electrostatic spinning; High voltage insulation test; Detector Array; Electrophoresis; Cable test.

### Specifications:

**Input:** + 24VDC  $\pm$  10%, 4.0 A.

**Output:** From 1kV to 60kV, 10 models. Positive or negative polarity output.

**Efficiency:** 80 to 85%, typical.

### Voltage regulation:

Load: 0.01% of output voltage no load to full load.

Line:  $\pm$ 0.01% for  $\pm$ 10% input voltage change,.

### Current regulation:

Load: 0.1% of output current from 0 to rated

voltage,

Line: 0.05% of rated current in the specified input range.

**Stability:** 0.02% every 8 hours.

**Temperature coefficient:** Voltage and current regulation, 0.01% per  $^{\circ}$  C..

**Ripple:** 0.1% p-p of the maximum output voltage.

### Environmental:

Temperature range:

Operating temperature: 0  $^{\circ}$  C to 40  $^{\circ}$  C.

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

Humidity: 0-90%, no condensation.

**Dimensions:** 127mm wide, 76mm high and 230mm deep.

**Weight:** 2.38 kg.

### Input connector:

12-pin AMPMetri-Mate (with matching connectors and pins).

**Output cable:** 45.7 cmUL approved high voltage wire.

### Front panel ground connector:

Thread 8-32 ground bolt, provide nut.

### Compliance certification:

Comply with EEC EMC instructions and EEC low voltage instructions. RoHS compliant.



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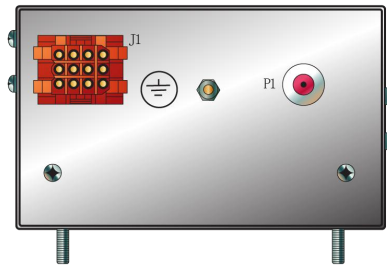
TSMS6075 Series High Voltage Power Supply Model  
Selection Table (Customizable):

Output rating		Type of power supply	
KV	MA	Positive polarity	Negative polarity
1	60	TSMS6075P1-60	TSMS6075N1-60
3	20	TSMS6075P3-60	TSMS6075N3-60
5	12	TSMS6075P5-60	TSMS6075N5-60
10	6	TSMS6075P10-60	TSMS6075N10-60
15	4	TSMS6075P15-60	TSMS6075N15-60
20	3	TSMS6075P20-60	TSMS6075N20-60
30	2	TSMS6075P30-60	TSMS6075N30-60
40	1.5	TSMS6075P40-60	TSMS6075N40-60
50	1.2	TSMS6075P50-60	TSMS6075N50-60
60	1	TSMS6075P60-60	TSMS6075N60-60

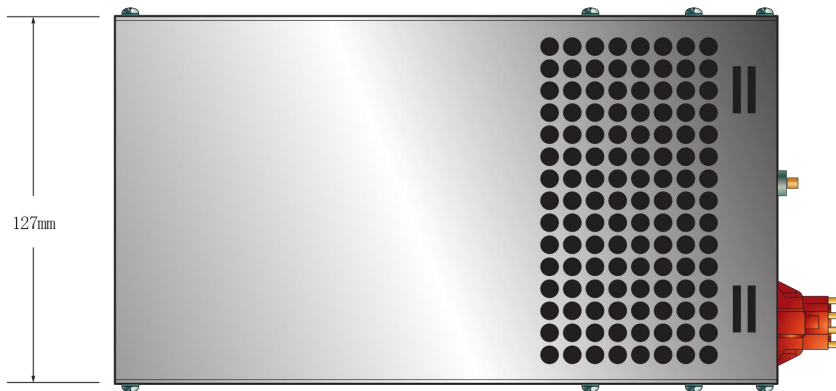
Connector 12 pins:

Stitch	Signal	Description
1	Power source ground	+ 24VDC returns
2	+ 24VDC input	+ 24VDC, max 3.5 A
3	High Voltage Enable/Disable	Open circuit = high voltage close, ground = high voltage open
4	Voltage test point	0 to 10VDC = 0 to 100% rated output
5	Current test point	0 to 10VDC = 0 to 100% rated output
6	Voltage programming	0 to 10VDC = 0 to 100% rated output
7	Current programming	0 to 10VDC = 0 to 100% rated output
8	+ 10VDC Reference	+ 10VDC, max 1mA
9	Signal ground	Signal ground
10	Standby	--
11	Standby	--
12	Standby	--

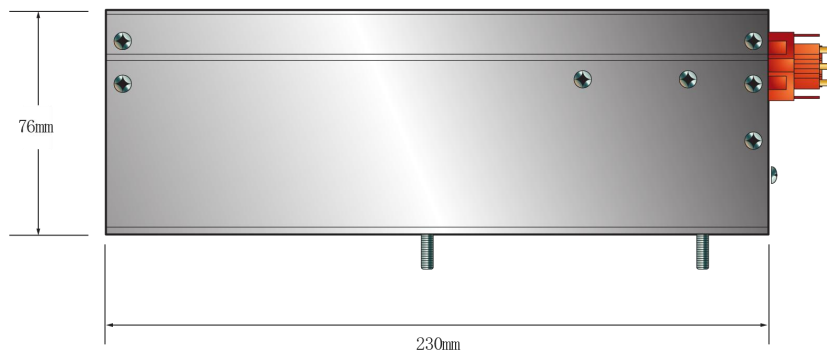
**Overall dimensions: mm**



**Front view**



**Top view**



**Side view**