

# TAP4055 Series Modular DC High Voltage Power Supply

**30kV, 120W, Solid State Structure,  
Adjustable Output Voltage And Current**



Teslaman TAP4055 Series High Voltage Power Supply is the supporting power supply for electrostatic dust removal and air and oil fume purification equipment. TAP4055 series power supply can also be connected with external potentiometer to realize remote control of high voltage output, and can also be connected with external voltage display, high voltage output over-voltage and short circuit protection, output constant current control and other functions.

- Maximum Output Voltage 30kV
- Maximum Output Power 120W
- Adjustable Output Voltage
- Adjustable Output Current
- CC and CV control
- Support External Voltage And Current LCD display
- Solid State Structure
- OEM Customization Available.

#### Typical Application:

Electrostatic dust removal; Oil fume purification; Capacitor charging and discharging; Electrostatic and negative ion generator; X-ray tube; Laser power supply; Non-woven fabric production, etc.

#### Specifications:

**Input:** AC220V  $\pm$  10%, 50/60 Hz.

**Output:** Maximum output voltages could be designed from 1kV to 30kV, and the maximum output power is 120W. 0 to the highest voltage is continuously adjustable, and the output is positive and negative single polarity.

**Remote Control Voltage:** 0 ~ 10V.

#### Voltage Control:

External control: TAP4055 can adjust the output voltage from 0 to the highest output voltage through external potentiometer.

#### Current control:

External control: TAP4055 can adjust the output current from 0 to the highest output current through external potentiometer.

#### Voltage And Current Regulation:

Load: 0.1% of output voltage no load to full load.

Line:  $\pm$  0.1% for  $\pm$ 10% change in input voltage.

#### Ripple Voltage:

Under the rated output voltage, the peak-to-peak ripple voltage is 1% of the maximum output voltage (0.1% Vp-p is optional).

#### Environmental:

Operational: 0 °C to + 50 °C.

Storage: -20 °C to + 80 °C.

**Temperature Coefficient:** 0.02% °C.

**Stability:** less than 0.1% every 8 hours after 1/2 hour warm-up.

#### Voltage And Current Indication:

0 to + 10V, with an accuracy of 1% under rated output conditions.

**Overall Dimensions:** 112.4 mm wide, 67mm high and 210mm deep.

#### Connectors:

High voltage cable: 2m standard, non-pluggable.

I/O connector: DB15 contains control and display signals.

#### Output Voltage Remote Control:

The output voltage can be remotely controlled by external potentiometer and + 10V voltage reference inside the power supply.

#### Output Current Remote Control:

The output current can be remotely controlled by external potentiometer and + 10V voltage reference inside the power supply.

#### Remote Voltage And Current Indication:

DB15 contains voltage and current indication signals from 0 to + 10V, and can be externally connected with various digital or pointer meters.

**Weight:** About 1.8kg.

### TAP4055 Series Model Selection Table

Output Rating		Type of Power Supply	
kV	mA	Positive Polarity	Negative Polarity
5	24	TAP4055P5-120	TAP4055N5-120
10	12	TAP4055P10-120	TAP4055N10-120
30	4	TAP4055P30-120	TAP4055N30-120

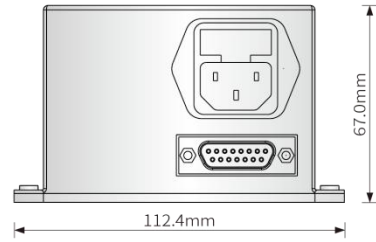
### Voltage control and display DB15 connector:

Pin	Signal	Pin	Signal
1	+ 10V reference	9	+ 5V
2	Voltage given input	10	Ground
3	Voltage given output	11	+ 15V
4	Current given input	12	Error indication
5	Current given output	13	Ground
6	Voltage display	14	Ground
7	Current display	15	High voltage switch control
8	Ground		

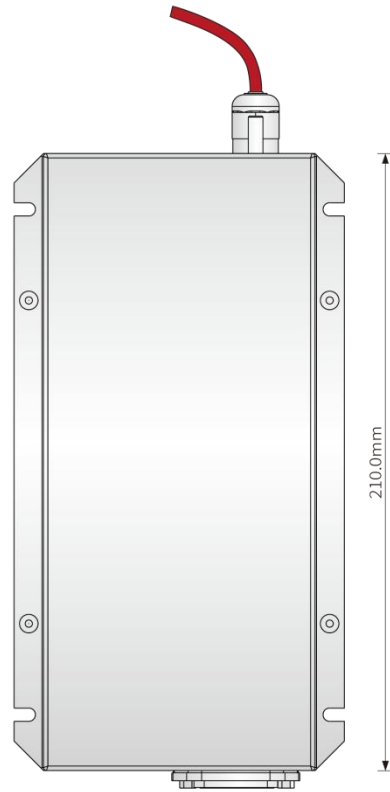
### 220V AC Power Connector:

Pin	1	2	3
Signal	Live Wire	Ground Wire	Null Line

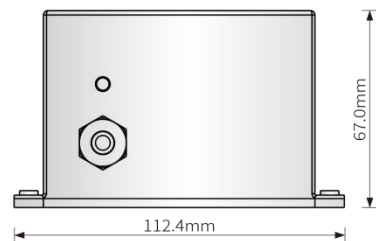
### Overall Dimensions: (unit: mm)



Front View



Top View



Rear View