

TAC4142 Series AC High Voltage Power Supply

**Peak to Peak 5kV-40kV , 150W, 5kHz-30kHz,
Center Frequency $\pm 10\%$ Adjustable**



Teslaman TAC4142 series is a multi-functional AC high voltage power supply, the output voltage and frequency are continuously adjustable. The output high voltage can achieve linear and stable rise. TAC4142 series power supply can also be connected with external potentiometer to realize remote control of output voltage and frequency, and has the functions of external voltage and frequency display, high voltage output overvoltage and short circuit protection, safety interlock and so on.

- Output Voltage 5kv-40kV p-p
- Output Power 150W
- Overvoltage, Overcurrent and Short Circuit Protection
- Voltage And Current Regulation Function
- Security Interlock Function
- The Center Frequency Is Optional From 5kHz To 30kHz, And The Center Frequency Is Adjustable By 10%
- OEM Customization Available

Typical Application:

Ion implantation; Hi-POT test;
Plasma; Alternating current
electrostatic field;
Scientific research, etc.

Specifications:

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

Output: Maximum output voltages could be designed from 5kV to 40kV, and the maximum output power is 150W. 0 to the highest voltage continuously adjustable.

Voltage Control:

Local control: The multi-turn potentiometer on the power supply panel can set the output voltage between 0 and the highest voltage.

External control: The external 0 to 10V control signal can adjust the output from 0V to the highest output voltage.

Frequency Control:

Local control: The multi-turn potentiometer provided by the power supply can set the frequency $\pm 10\%$ of the center frequency.

External control: The external 0 to 10V control signal can set the frequency $\pm 10\%$ of the center frequency.

Center Frequency Range: 5kHz-30kHz $\pm 10\%$ adjustable.

Voltage Regulation:

Load: 0.5% of output voltage no load to full load.

Line: 0.5% \pm for 10% change in input voltage.

Current Regulation:

Load: 0.5% of output current form 0 to rated load.

line: 0.5% for $\pm 10\%$ change in input voltage.

Stability: less than 0.5% 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.

Connectors:

High Voltage Output Connector: Recessed epoxy insulated conduit and probed high voltage cable are connected by a 16mm diameter metal connector. The standard high voltage cable is 1 meter long.

Environmental:

Operational: 0 °C to + 50 °C.

Storage:-20 °C to + 80 °C.

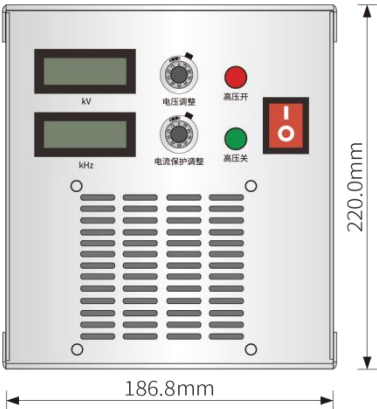
Temperature Coefficient: 0.01% per °C.

Overall Dimensions: 186.8 mm wide, 220mm high and 375.2 mm deep.

Remote Control of Output Voltage And Current:

External potentiometer can be used to control the output voltage and current remotely by using 10V reference voltage inside the power supply.

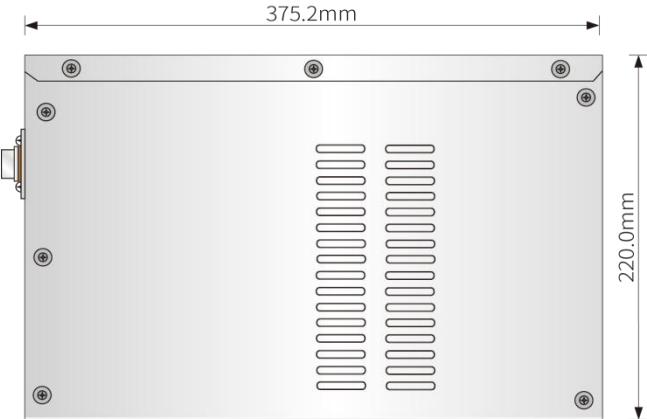
Overall Dimensions: (unit: mm)



Front View



Rear View



Side View