

TXF1068 Series

High Voltage Power Supply for X-ray Machine

1.8 kW -6kW, 160kV-450 kV, High Precision, Integrated Filament Power Supply



Teslaman TXF Series X-ray High Voltage Power Supply Set Standard 1.8 kW-6kW Compact High Performance X-ray High Voltage Power Supply. The output voltage ranges from 160kV to 450kV in negative, positive, or bipolar output configurations, and active power factor correction circuits reduce input current requirements while minimizing relative input correlation with EMI. USB Ethernet based on DSP control circuit to provide you with SMT selection. And RS-232 communication interface, as well as simulation simplifies OEM system integration. The two DC output, current-regulated filament power supply provides accurate and stable X-ray tube power supply through a complex emission current regulation control circuit.

- Output Voltage From 160kV to 450kV
- Completion X-ray Generator
- Power Factor Correction AC Input Circuit
- Integrated Dual Filament Supply
- Digital Interface USB, Ethernet And RS-232
- Have Stability And Regulation
- OEM Customization Available

Typical Application:

X-ray generator, nondestructive testing.

Specifications:

Input: 180-264V \pm 10% AC. Single phase: 47-63Hz.

Input Current: 6kW, 208V \pm 10% AC.

Output Voltage: 160kV, 225kV, 320kV, 450kV.

Output Polarity:

Inside the power supply: The multi-turn potentiometer provided by the power supply can set the output voltage between 0V and the highest voltage.

External remote control: External 0 to 10V control signal can output from 0V adjust to the maximum output voltage.

Emission Current Control:

Inside the power supply: The multi-turn potentiometer of the power supply can set the electron beam current from 0A to the maximum current.

External remote control: The external 0 to 10V control signal can set the electron beam current from 0A to the maximum current.

Voltage Regulation Rate:

Relative load: \pm 0.1% (no load to rated load).

Relative input: \pm 0.1% (input voltage varies from 30% to 100% of rated output voltage).

Current Adjustment Rate:

Relative load: 0.05% (no load to rated load).

Relative input: 0.05% rated output voltage exceeds the specified input voltage range.

Ripple Voltage: Peak-peak of ripple voltage under the condition of output rated voltage

The value is 0.25% of the maximum output voltage.

Environmental:

Operational: 0 °C to + 50 °C. Storage: -20 °C to + 80 °C.

Temperature Coefficient: 0.5% per degree Celsius.

Stability: It is less than or equal to 0.1% every 8 hours after starting up for half an hour.

Overall Dimensions: 770mm long, 422mm wide and 396mm high.

Connectors: High voltage output connectors: recessed epoxy insulated conduits and

The penetrated high-voltage cable passes through metal with a diameter of 16mm.

Connector connection. The total length of high voltage cable is 1m. A VB GUI provides RS-232/USB, Ethernet

Interface has an embedded control program type

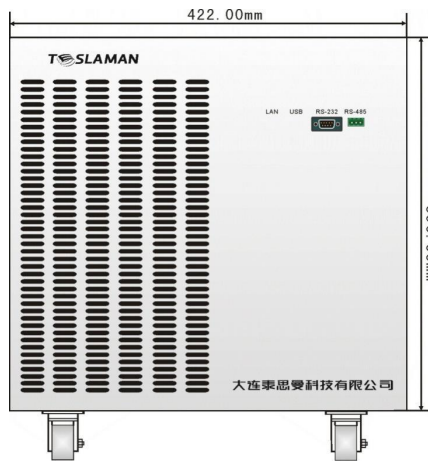
Voltage and current control DB9 connector J5:

J5	Signal	J5	Signal
1	10V Reference Voltage	6	Current control signal input
2	Standby	7	Current control signal output
3	Voltage Control Signal Input	8	Standby
4	Voltage Control Signal Output	9	Ground
5	Standby		

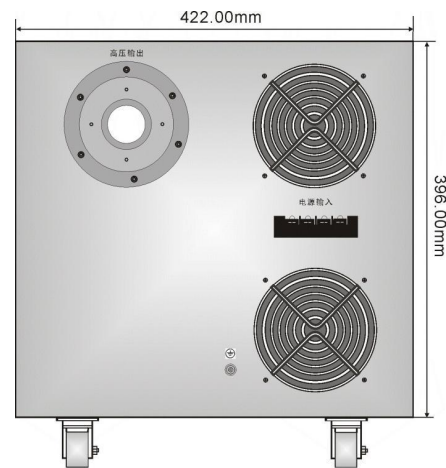
Voltage and current indication connector J4:

J4	Signal	J4	Signal
1	Ground	3	Current indication signal
2	Voltage Indication Signal	4	Interlock control

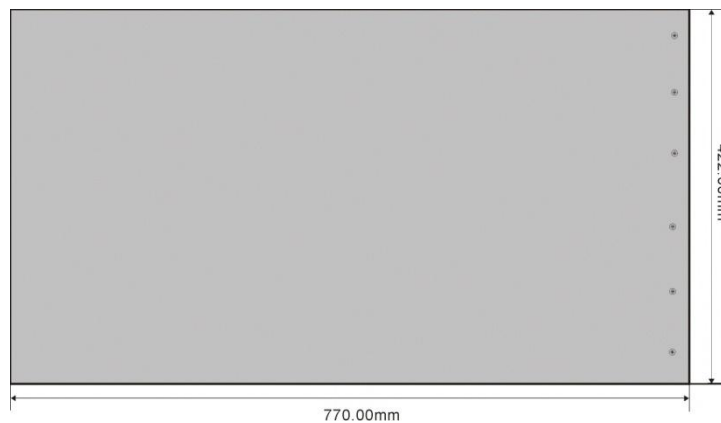
Overall Dimensions: mm



Front View



Rear View



Side View