

Chapter 1 Introduction

TM6211 Series

Cable Failure Test High Voltage Power Supply | 1kV~32kV, 1.6kW, grounding detection, input-output isolation



- Equipped with grounding detection function
- Input and output are not common ground
- Nanosecond level protection response
- Remote analog and remote CAN/RS485 communication control
- Overvoltage, overcurrent, short circuit, and arc protection

Product Introduction:

Teslaman TM6211 series is a high-voltage power supply specifically designed for cable fault detection, suitable for outdoor cable fault detection scenarios. Its unique grounding detection technology can prevent the high-voltage power supply from working when the equipment is poorly grounded, in order to avoid equipment damage and personnel injury. It has two control modes: analog control and CAN/RS485 communication control, which can meet the needs of customers for various functions. The nanosecond arc protection response capability ensures that the power supply operates without faults, and the efficiency can reach over 90%

Typical Applications:

Capacitor Charging; Cable fault detection.

Specification Description:

Input	AC220V \pm 10%, 50/60 Hz.
Output	1-32kV three output models, continuously adjustable from 0 to the highest voltage, Maximum output power 1.6kW Optional. Output positive and negative single polarity.
Voltage Control	Analog control: The external 0 to 10V control signal can adjust the output from 0 to the highest voltage. Digital control: RS485/CAN
Voltage Linear Adjustment Rate	<0.5%.
Load Adjustment Rate	<0.5%.
Environmental	Working: 0°C to +50°C. Storage time: -20°C to +80°C.
Stability	After 0.5 hours of preheating, it is less than 1% every 8 hours.
Appearance Size	Wide 210Mm, high 140Mm, deep 275Mm.
Weight	8.65 Kilogram.
High Voltage Connector	The concave plastic insulated catheter and the incoming high-voltage cable are connected through metal connectors with a diameter of 16 mm. Standard high-voltage cable length is 2m.
Voltage and Current Analog Control	The external potentiometer uses the 10V reference voltage inside the power supply to control the output voltage and current.
Voltage Current Indicator	DB-15 terminal contains voltage and current indicator signals from 0 to 10V, which can be connected to various numbers or pointer meters.

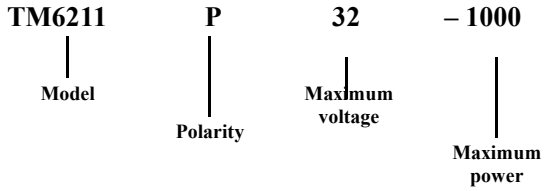
Description of Model Code

The model code represents the performance and parameters of the power supply, which include:

Maximum output voltage in kV (kV);

Maximum output power in W (watts);

Output polarity, P represents positive output and N represents negative output;



TM6211Series high-voltage power supply model selection table (1kW):

Output Rated Value		Power Supply Model	
kV	mA	Positive Polarity	Negative Polarity
10	160	TM6211P10-1600	TM6211N10-1600
15	40	TM6211P15-600	TM6211N15-600
32	31.25	TM6211P32-1000	TM6211N32-1000

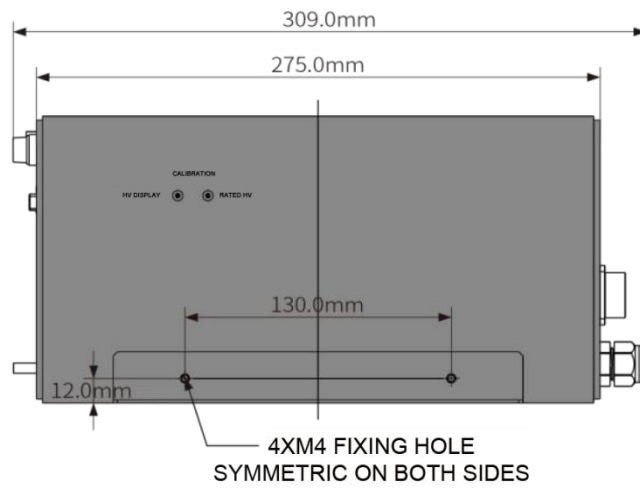
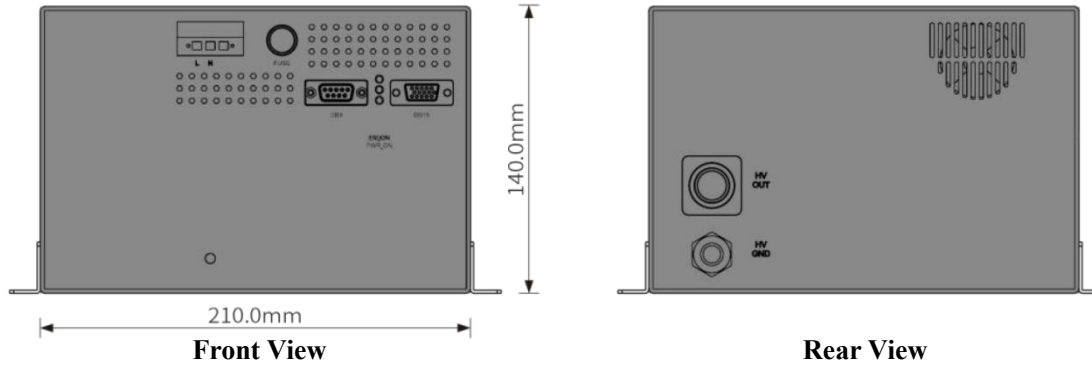
Power Input Terminals:

Label	Signal	Label	Signal	Label	Signal
L	Live Wire	N	Netural line	G	Ground wire

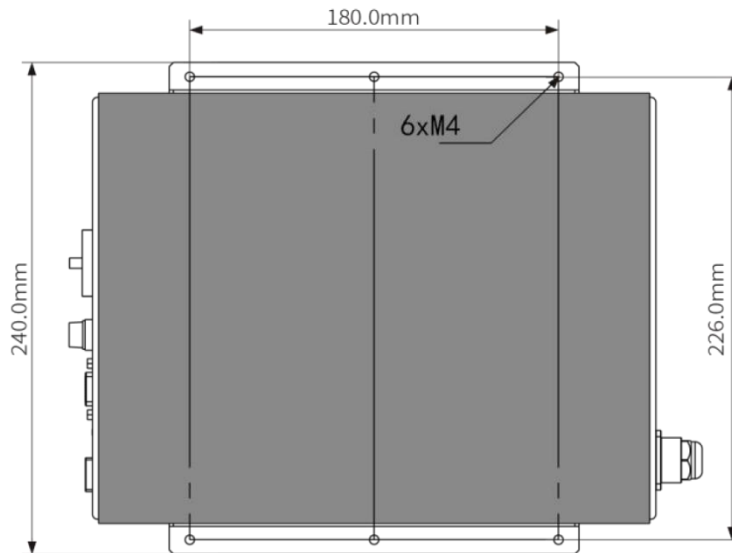
TM6211Power supply DB15 connector signal definition:

Pin	Signal	Explain
1	Current display	0 to 10 V = 0 to 100% rated output
2	+10V	+10VDC,1mA (maximum)
3	Voltage gear selection 1	Corresponding rating 8kVHigh voltage output, effective grounding
4	Voltage gear selection 2	Corresponding rating 16kVHigh voltage output, effective grounding
5	Voltage gear selection 3	Corresponding rating 32kVHigh voltage output, effective grounding
6	Voltage display	0~10V corresponds to 0~100% rated output
7	NC	/
8	Voltage setting input	0~10V corresponds to 0~100% rated output
9	Local/remote control switching	Grounding is controlled by DB15, and disconnection is controlled by remote CAN/RS485 communication
10	Signal Ground	High voltage switch signal ground
11	Analog Ground	Voltage current given and displayed
12	NC	/
13	NC	/
14	NC	/
15	High Voltage On/off Signal	Ground for HV on, Open circuit HV off

Dimensions: mm



Side View



Top View