

# TCM6008 Series High Voltage DC Power Supply

Rated Voltage 50kV, Rated Power 250W



Teslaman TCM6008 series high voltage power supply, using full digital PID control mode, has fast voltage and current transient response capability. The functions of the power supply include: unreliable grounding output suppression function, real-time clock dunning function, dust-proof and foreign matter-proof function, intelligent automatic adjustment function of abnormal load, etc.

- Maximum Output Voltage 50kV, Adjustable
- Maximum Output Current 10mA
- Maximum Output Power 250W
- Abnormal Adaptive Uninterrupted Operation
- RS485 Digital Communication Interface

#### Typical Application:

Plastic separation, ore separation and other applications.

#### Specifications:

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

**Output:** The maximum voltage is 50kV, the maximum output current is 10mA, and the maximum power is 250W.

**Front Panel Functions:** power on/off, auto-start, memory, voltage/current preset, high voltage output/turn-off, user interface settings and voltage/current output adjustment.

**Front Panel Status Indication:** polarity indication, constant voltage/constant current mode, self-starting status, memory status, preset status, output status and error code display.

**Voltage control:** The rotary encoder of the power supply can set the output voltage between 0 and the highest voltage.

**Current Control:** Current regulation can be realized through preset functions.

**Coarse/Fine Adjustment Function:** The power supply automatically identifies coarse/fine adjustment according to the rotation rate of the knob. Large step output when rotating quickly and small step output when rotating slowly.

#### Remote Control:

RS485 digital communication interface can be optional, and can communicate with the host computer or other digital equipment. Our company provides upper computer software for testing only. The equipment adopts Modbus communication protocol, and refer to Appendix "Communication Protocol Part" for relevant information.

#### Voltage Regulation Rate:

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

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

#### Current Adjustment Rate:

Load: 0.01% of output current from 0 to rated voltage.

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

#### Ripple Voltage:

less than 2% rms at rated voltage.

#### Environmental:

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

**Temperature Coefficient:** Usually 100ppm per °C.

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

Humidity: 10-90% without condensation.

#### Voltage and Current Display:

Three-digit nixie tube.

#### Overall Dimensions:

The width is 199mm, the height is 120mm and the depth is 230mm.

**Weight:** About 6kg.

#### High Voltage Output Cable:

The power supply has its own shielded high-voltage cable. The standard high voltage cable is 3 meters long and 5.5 mm outside diameter. Other lengths are optional.

# Overall Dimensions: mm

