

TMCP6118 Series

High Voltage DC Power Supply

+100V to +3kV, 1W, Floating Output, Low Ripple



Teslaman TMCP6118 is a 1W DC output power supply, Compact model with 24VDC input, Max output voltage up to +3kV and Max current is 330 μ A. The product features floating isolation, high efficiency, compact package and low ripple. Through 9-pin d-connector interface, remote user control and adjustment can be realized. The power supply is compact and light, and the output is positive polarity.

- Floating to the Ground 3kV.
- 1W Output Power
- Voltage Programming and Monitoring
- Low Ripple and Noise
- Module Structure
- Analog Control

Typical Applications:

- Mass Spectrometry Detectors
- Microchannel Plates
- Electron Multipliers
- Channel Electron Multipliers
- Photomultiplier tubes

SPECIFICATIONS:

Input Voltage:+24VDC, \pm 0.5VDC

Input Current:600mA maximum

Output Voltage:+100V to +3kV

Output Current: 330 μ A maximum

Polarity:Positive

Output Power:1W maximum

Isolation Voltage:

Up to 15kV total to ground (resistance to ground 600M on each output)

Line Regulation: \leq 0.01% for input voltage change of 1V

Load Regulation: \leq 0.1% for a no load to full load change

Voltage Programming:

0 to 10 volt corresponds to 0 to 100% of rated output voltage

Voltage Monitor:

0 to 5 volts corresponds to 0 to 100% of rated output voltage

Accuracy: \pm 1% from 10% to 100% of output.

Below 10% accuracy spec is not guaranteed

Ripple: \leq 0.1% Volts p-p, 0.1Hz to 1MHz

Stability: \leq 1000 ppm/hour at constant operating conditions after a 1 hour warm up

Temperature Coefficient: \leq 300ppm per degree C

Environmental: Temperature Range:

Operating: 0 $^{\circ}$ C to 40 $^{\circ}$ C

Storage: -40 $^{\circ}$ C to 85 $^{\circ}$ C

Humidity: 10% to 90%, non-condensing.

Cooling: Convection cooled

Dimensions:W 104mm, H 38mm, D 171mm

Weight: 1kg

Interface/Power Connector:9 pin Male D connector.

High Voltage Output Cable:

HV positive:750mm fly wire, URM76 coaxial HV cable

HV negative:750mm fly wire, URM76 coaxial HV cable

TMCP6118 INTERFACE/POWER CONNECTOR:

Pin	Signal	Signal Parameter
1	Signal Ground	Signal Ground
2	Voltage Programming Input	0-10Vdc = 0-100% of Rated Output
3	+24V Input	+24V Input
4	+24V Input	+24V Input
5	Voltage Monitor	0-5Vdc=0-100% of Rated Output
6	Power Ground	Power Ground
7	Power Ground	Power Ground
8	Power Ground	Power Ground
9	Power Ground	Power Ground

Dimensions:mm

