

# THRC6980 Series

## DC-HVDC CONVERTER

**6kV,5W,Less than 1U Height**



The THRC6980 Series, is a miniature 5W regulated high voltage DC-DC converter product line providing voltages up to 6kV. HRC05 provides a well regulated and fully adjustable output voltage with built in short circuit and overload protection. The adjustable output voltage can be controlled from 0 to 100% with a 0 to +5VDC input.

Voltage and current monitor outputs and a +5VDC reference output are included in the standard package for easier high voltage integration. The input control and output monitor signals are digital compatible making these modules an ideal solution for a wide range of high voltage applications.

- +24VDC input (22 to 30V)
- Output voltages up to 6kV
- 0 to 100% programmable output voltage
- Voltage and current monitor output
- On-board +5V reference
- Load and line regulation <0.01%
- Low ripple <0.01%
- Short Circuit, arc and overload protections
- Operating temperature: -40°C to +70°C
- 1 year warranty

### Typical Applications:

- Mass Spectrometry
- Electrophoresis
- Electrostatic Chuck
- High Voltage Bias
- Capacitor charging
- Detectors
- Scanning Electron Microscopy

### Specifications:

**Input:**+24VDC

#### Output:

Rated Voltage: 6kV, Rated Current: 14.3mA, programmable output from 0 to 100% of rated voltage.

#### Voltage Regulation:

Load:0.01% (No load to full load).

Line:±0.01%(±10% of input voltage change).

#### Current Regulation:

Load:0.01% (no load to full load).

Line:±0.01%(±10% of input voltage change).

#### Ripple:

Better than 1%rms(0.1%rms optional), under rated output condition.

#### Environmental:

Operational:-40°C to +70°C.

Storage:-55°C to +105°C.

#### Temperature Coefficient:

Voltage and current better than 100 ppm/°C.

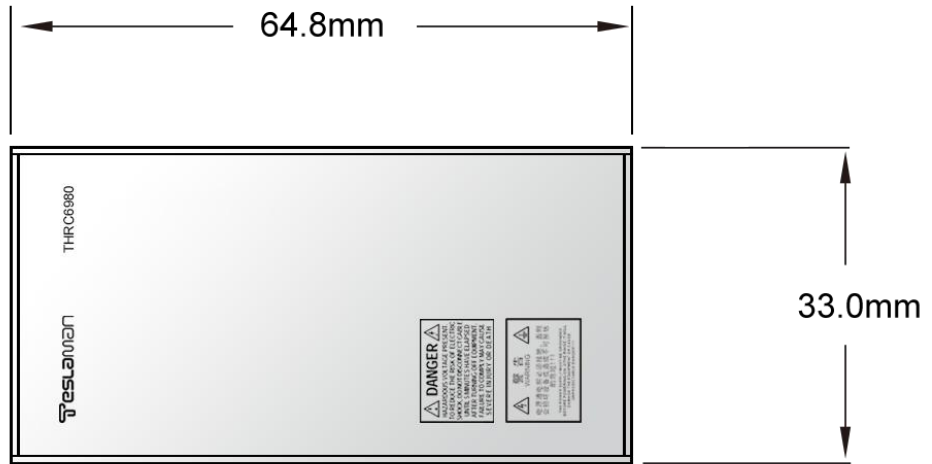
**Cooling:**Natural Convection

**Stability:**0.1%. Less than 0.1% every 8 hours after half hour warm-up.

**Dimensions:**W33.0mm,H15.2mm,D64.8mm.

**Weight:**74g.

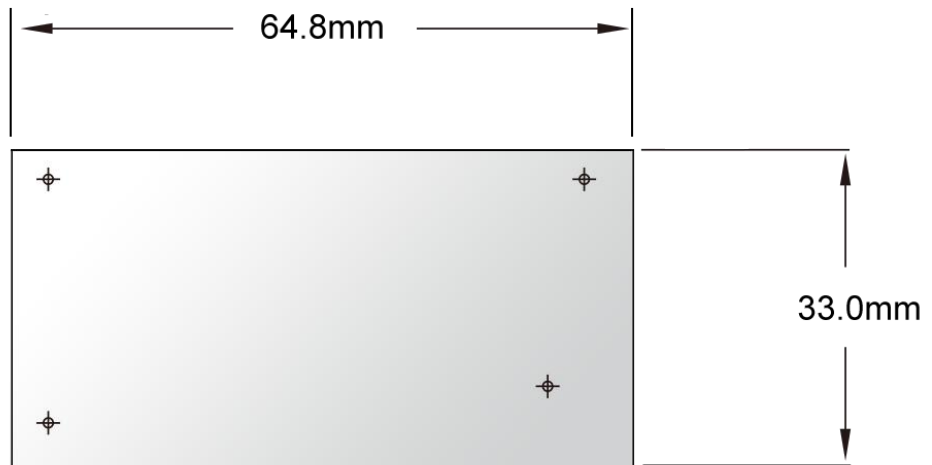
# Dimensions:mm



Top View



Side View



Bottom View