



# GENVOLT 7000D



Dual Output High Voltage  
Laboratory Power Supply



# Genvolt

HIGH VOLTAGE POWER SUPPLIES

# SPECIFICATION

The 7000D range of high voltage power supplies are used primarily as laboratory power supplies. The power supply has two LED digital voltage reading, adjustable voltage range, highly stable output and low ripple. The unit is available in positive, negative polarity or both and two output connectors depending on customer requirements. Both AC and DC input units are supplied with HV output cables. AC input unit is also supplied with IEC connector and cable, and DC input unit is supplied with 24V 5 way XLR connector (female).

## Input Specifications

|                         |   |
|-------------------------|---|
| DC Input Voltage Range  | 22 - 26 VDC   |
| AC Input Voltage Range  | 85 - 260 VAC  |
| DC Input Current        | 2.5A maximum. At full power and minimum input voltage |
| Efficiency at Full Load | more than 70%   |

|                         |   |
|-------------------------|---|
| Voltage Line Regulation | Less than 0.3% for an input changing from maximum input to minimum input. |
| Voltage Ripple          | Less than 0.01% (peak to peak) of maximum output voltage.                 |
| Voltage Stability       | Less than 0.05% for 8 hours per day with 30 mins warm-up.                 |
| Temperature Coefficient | Less than 200ppm/°C over the specified temperature.                       |

## Output Specifications

|                         | 70130   | 70230 | 71030  | 72030  | 73030  | 73530  |
|-------------------------|---|-------|--------|--------|--------|--------|
| Output Voltage Range*   | 0-1kV   | 0-2kV | 0-10kV | 0-20kV | 0-30kV | 0-35kV |
| Maximum Output Current  | 30mA  | 15mA  | 3.0mA  | 1.5mA  | 1.0mA  | 0.85mA |
| Output Power            | 0 - 30W   |       |        |        |        |        |
| Output Polarity         | Positive or Negative With Respective to Ground                |       |        |        |        |        |
| Voltage Load Regulation | Less than 0.01% for a load changing from no load to full load |       |        |        |        |        |

\*For other output voltages please contact us.

## Circuit Protection

- Overload, arcing and short circuit
- Unit enters constant current mode when fault occurs
- DC input unit protected against reverse polarity from power supply

## Options

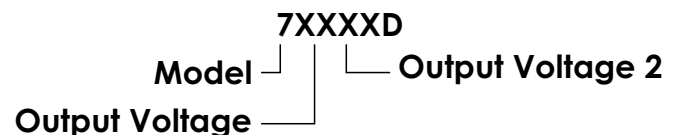
- Remote interlock available on DC input version
- Rack mounted

Please specify when ordering. For further information please contact us.

## Reliability and Quality Control

- Each power supply has been soak tested with full load at 40°C for no less than 24 hours.

## Model Number

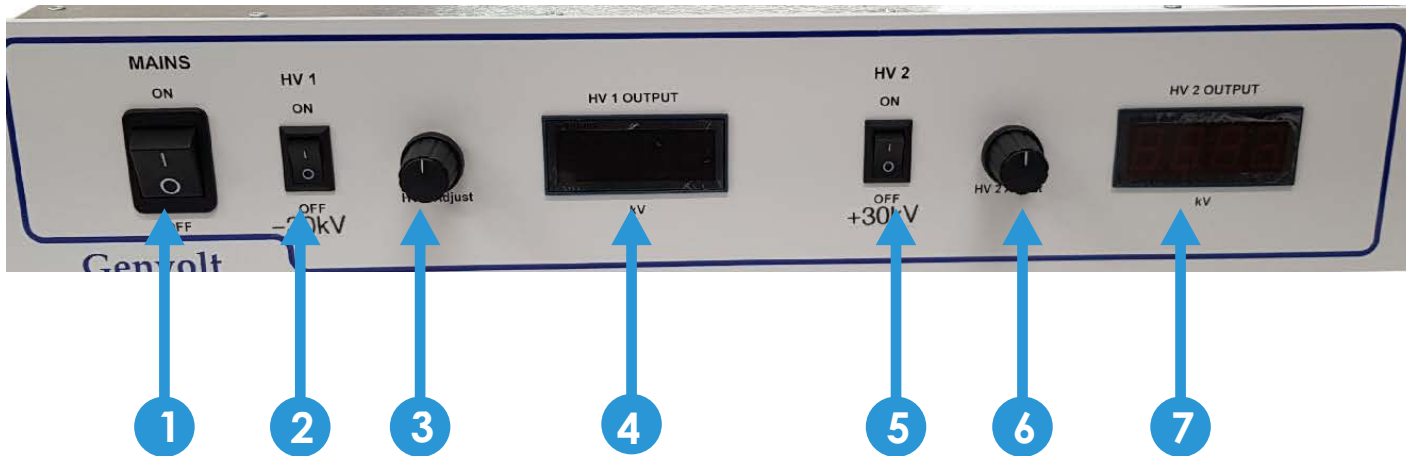




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# FRONT CONTROLS



1. Power main switch



This switch controls the input of the entire power supply. Please ensure equipment is turned off during maintenance.

2. High voltage switch



PSU 1. This switch controls the high voltage function of unit 1.

3. High voltage adjust PSU1



10-turn potentiometer for adjusting output voltage for unit 1.

4. kV for PSU1



Digital display for output voltage.

5. High voltage switch



PSU 2. This switch controls the high voltage function of unit 2.

6. High voltage adjust PSU2



10-turn potentiometer for adjusting output voltage for unit 2.

7. kV for PSU2



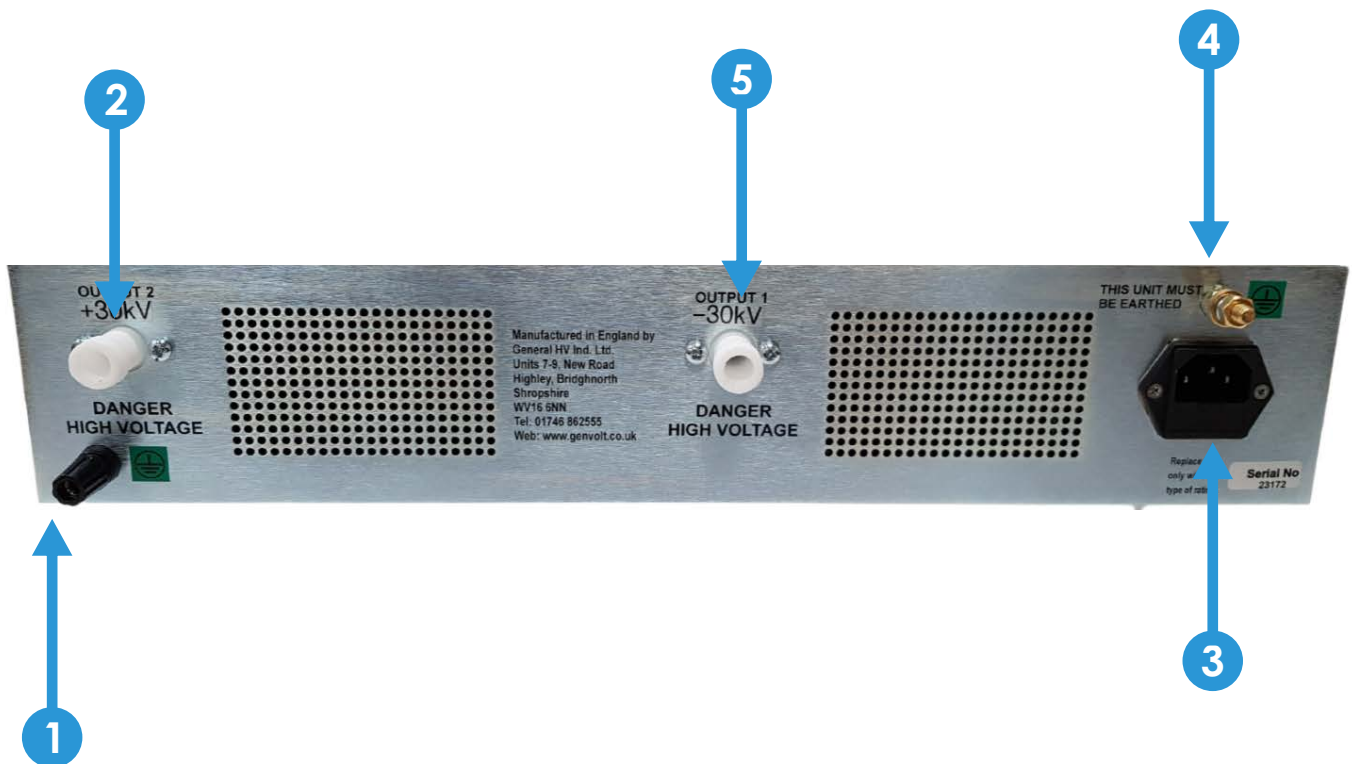
Digital display for output voltage.



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# REAR CONTROLS



1. 4mm socket terminal - High Voltage Ground.

2. High voltage output connector PSU2.

3. Input connector: available in both DC 5 way connector or AC standard IEC connector.

4. M6 for earth bonding.

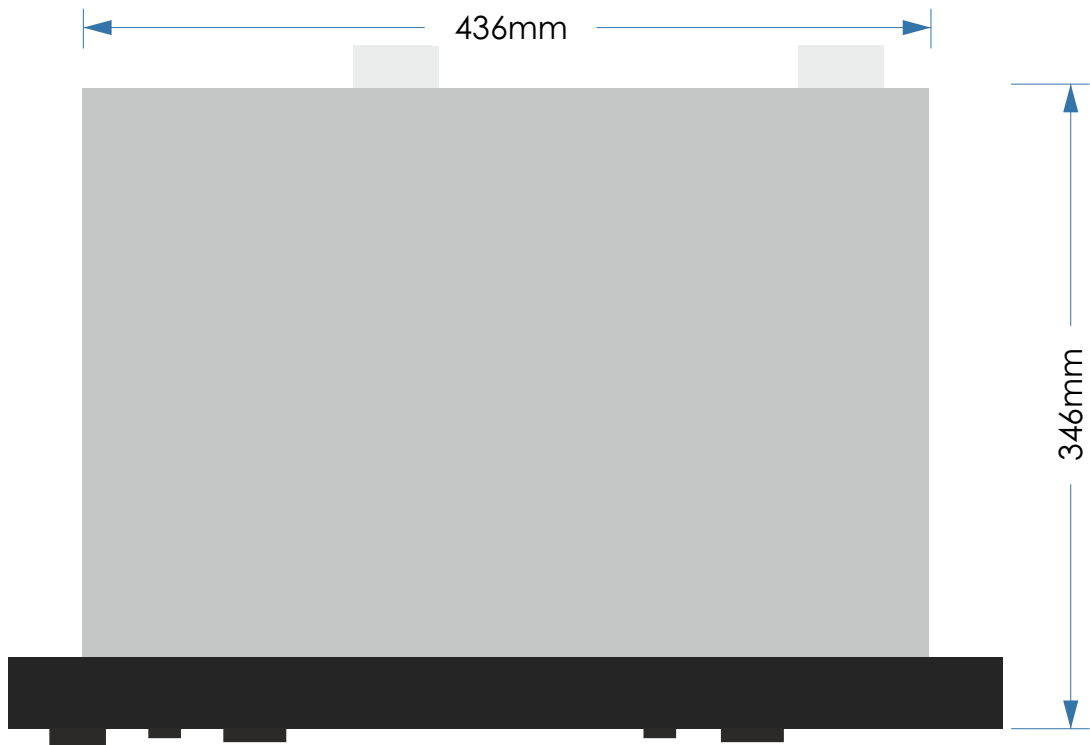
5. High voltage output connector PSU1.



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# DIMENSIONS





## Safety

- This power supply contains hazardous voltages and stored energy. Contact with the output may result in fatal injury. It should only be used and maintained by trained personnel.
- The area where the power supply is to be used should be kept clean and dry.
- Before switching the power supply on please confirm that the 10-turn potentiometer is turned fully in a counter-clockwise direction.
- Keep a safe distance from the output connector and any items connected to it.
- Ensure that a secure connection is made between the Earth side of the load and the green and yellow Earth lead.

## Environmental Details

|                       |                         |
|-----------------------|-------------------------|
| Operating Temperature | 0 to 40°C               |
| Storage Temperature   | -20 to 60°C             |
| Humidity              | 0 to 90% non-condensing |

## Mechanical Details

|                       |  |
|-----------------------|--|
| Weight                | DC Input: 4.45kg (9.81lbs)               |
|                       | AC Input: 6.05kg (13.34lbs)              |
| Dimensions            | Front: 483mm x 88mm                      |
|                       | Cabinet: 436mm x 346mm x 88mm            |
| Power Input Connector | AC Input: Standard IEC Connector         |
|                       | DC Input: 24V 5 way XLR Connector (male) |

*For requirements other than those specified, please do not hesitate to contact us. Please note that design improvements may lead to specification changes.*



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HIGH VOLTAGE POWER SUPPLIES

# COMBINATIONS

## 7000D Series Dual Output, 19" Rack Mounted PSU

| MODEL   | DESCRIPTION   | OUTPUT 1 | OUTPUT 2 |
|---------|---|----------|----------|
| 71010PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 10kV+    | 10kV+    |
| 71020PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 10kV+    | 20kV+    |
| 71030PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 10kV+    | 30kV+    |
| 71035PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 10kV+    | 35kV+    |
| 71010ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 10kV+    | 10kV-    |
| 71020ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 10kV+    | 20kV-    |
| 71030ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 10kV+    | 30kV-    |
| 71035ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 10kV+    | 35kV-    |
| 72010PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 20kV+    | 10kV+    |
| 72020PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 20kV+    | 20kV+    |
| 72030PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 20kV+    | 30kV+    |
| 72035PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 20kV+    | 35kV+    |
| 72010ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 20kV+    | 10kV-    |
| 72020ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 20kV+    | 20kV-    |
| 72030ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 20kV+    | 30kV-    |
| 72035ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 20kV+    | 35kV-    |
| 73010PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 30kV+    | 10kV+    |
| 73020PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 30kV+    | 20kV+    |
| 73030PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 30kV+    | 30kV+    |
| 73035PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 30kV+    | 35kV+    |
| 73010ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 30kV+    | 10kV-    |
| 73020ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 30kV+    | 20kV-    |
| 73030ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 30kV+    | 30kV-    |
| 73035ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 30kV+    | 35kV-    |
| 73510PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 35kV+    | 10kV+    |
| 73520PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 35kV+    | 20kV+    |
| 73530PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 35kV+    | 30kV+    |
| 73535PD | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 35kV+    | 35kV+    |
| 73510ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 35kV+    | 10kV-    |
| 73520ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 35kV+    | 20kV-    |
| 73530ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 35kV+    | 30kV-    |
| 73535ND | Dual Independent Output, 2 x 30W, 2U High, Rack Mounted PSU | 35kV+    | 35kV-    |



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