



ESP01 Range

4kW to 12kW high voltage power supply for air purification



Specification Summary

The Genvolt designed ESP01 Series high voltage power supplies produce output power from 4kW to 12kW, and output voltage from 10kV to 60kV. The ESP01 Series use high frequency inverter and control circuits providing high efficiency and a high tolerance to the noise generated by electrical discharges.

The ESP01 Series can be applied in air purification systems such as in chemical industries, printing factories and etc.

Input specification

AC input voltage range	Three phase 380VAC \pm 5%
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Output specification

Output voltage range	60kV maximum
Output current	Constant current set up by external control
Output power	12kW maximum
Voltage load regulation	Less than 2.5%
Voltage line regulation	Less than 2%
Temperature drift	Less than 300ppm/ $^{\circ}$ C when operating under 55 $^{\circ}$ C

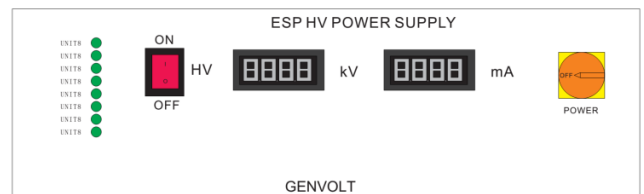
Protection

Circuit protection

The power supply is protected from events of sparking, overload and short circuit. The output voltage will be regulated when operating at no load to prevent over-voltage.

Controls

Front panel



LEDs: up to Unit 12	Display each module status in the power supply. Green light for system normal.
HV ON/OFF switch	Switch for turning high voltage output on or off.
HV and mA monitor	Digital display for output voltage and current
ON/OFF switch	Switching mains input



Control interface



BOTTOM VIEW

Input	Standard 380VAC three phase cable includes Neutral. Provided with customised length.
Output	Genvolt designed HV output connector made of PTFE. Provided with customised length.

Environmental details

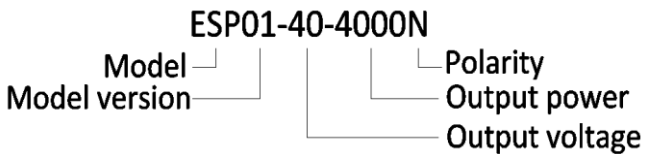
Operating temperature	-10 to 40°C
Relative humidity	Less than 90% non-condensing

Mechanical details*

Weight	160kg maximum
Dimensions (mm)	1676 x 540 x 1070

*The weight and height of the power supply may change subject to different output power.

Model number



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.
- 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.

Dimensions (mm)

