



Europa Range

Laboratory power supply – 20, 35, 50 & 100kV



Specification Summary

The Europa range of power supplies are a classic high voltage power supply design for laboratory applications. Up to 100kV output voltage is available and both positive and negative polarities can be provided. Extremely accurate output parameters are achieved as can be seen from the specification. The power supply is also well protected against erratic line and load conditions. The reversible section is removable in the form of a drawer accessible from the front of the unit. Two sections – one positive and one negative are exchanged to engage the alternative polarity. Control and monitoring can be via an IEEE interface or by front panel potentiometers.

Electrical Specification

| V | I | W |
|-------|------|------|
| 100kV | 1mA | 100W |
| 50kV | 4mA | 200W |
| 35kV | 6mA | 210W |
| 20kV | 10mA | 200W |

| | |
|------------------------|--|
| Line Regulation | Not more than 50ppm of maximum rated output voltage for $\pm 10\%$ input line change |
| Load Regulation | Not more than 100ppm of maximum rated output voltage for 0 to maximum output current change. |
| Ripple | Not more than 20V (peak to peak) - 100W Version |

Temperature Coefficient

| | |
|---------------------------------------|--|
| (0 to 50°C) | Not more than 50ppm of maximum output per °C |
| Stability After ½ Hour Warm Up | Not more than 0.01% per hour Not more than 0.02% per 8 hours. |

Front Panel Feature

| | |
|-----------------------------|---|
| Front Panel Meters | Front panel meters are available for reading output voltage and current with accuracy of $\pm 2\%$ of full scale. |
| Front Panel Controls | Front panel controls are available for output voltage and current control. |
| Protection | The power supply is protected against overloads, short circuits and arcs. |

Mechanical Features

| | |
|---|--|
| Size | 19 inch wide suitable for standard rack mounting, 6U high |
| Weight | Main Unit: 35kg Alternative Polarity Head: 12kg |
| High Voltage Connector And Cable | Pre-assembled mating high voltage connector with 3 metres of high voltage shielded cable will be provided as standard. |
| Power Input Connector | A 2m 3-wire mains lead plug will be provided as standard. |
| Cooling | Forced air by means of a fan. |
| IEEE-488 Interface | Full talker/listener capability is available through the IEEE-488 interface. The interface functions allow output voltage and current limit to be programmed via the IEEE-488 bus. In addition, voltage and current measurements can be taken on request. |
| Power Requirements | 230V AC $\pm 10\%$, less than 2A, 50Hz. |

Environmental Specification

| | |
|--------------------------|---|
| Temperature | Operating: 15°C to 35°C. Storage: 0°C to 50°C. |
| Relative Humidity | Operating: 30% to 80%. Storage: < 95%. |