



## Features

- Wide output dual polarity voltage range
- Local control on Front Panel with LCD display and pushbutton/dial controls
- Remote Control via USB
- Very low ripple

## Description

CPS Model BP2595 is a bipolar high voltage power supply that includes two internal 50kV power supplies, one positive polarity, the other negative. There is a single common output, a high voltage connector, that is connected to both power supplies by means of an internal high voltage switching mechanism.

The high voltage switching mechanism selects an internal 50kV power supply based on target polarity. When the target polarity is changed, the switching mechanism will be activated automatically after the output voltage has discharged.

The BP2595 has 2 modes of user operation: Local, using controls and displays on the front panel and Remote, using an external computer connected to the BP2595 via USB.

## Electrical Specifications

Electrical specification is met after 1-hour warm-up time.

Output Voltage:  $\pm 50\text{kVDC}$  (programmable).

Output Current:  $500\mu\text{A}$  @ 50kV Absolute Max.

Output Ripple:  $< 100\text{mVp-p}$  at full output voltage and  $100\mu\text{A}$  load.  
 $< 1\text{Vp-p}$  at full voltage and up to  $500\mu\text{A}$  load.

Load Regulation:  $< 0.01\%$  for load current change from 0 to  $100\mu\text{A}$  at full voltage.  
 $< 0.01\%$  for load current change from 0 to  $500\mu\text{A}$  at full voltage.

Line regulation:  $.02\%$  (110VAC to 125 VAC)

Long term stability:  $< 50\text{ppm}$  per 1 hour.

Temperature Coefficient:  $< 50\text{ppm}/^\circ\text{C}$ .

Output Protection: Short circuit and arc protected.

Programming: 16 bit resolution for full output voltage.

Voltage monitor: 16 bit resolution for full output voltage.

Current monitor: 16 bit resolution for full output current.

Operating temperature: 0 to  $50^\circ\text{C}$ .

Input voltage: 120 or 220 VAC (selectable).

Input current: 400 mA max at no-load, 700 mA max at  $100\mu\text{A}$  load, 2.5 A max at  $500\mu\text{A}$  load.

Internal Fuse: 125V, 5A.