

## ES008RCP150 BI-POLAR ELECTROSPRAY 8 kV MODULES

### Applications

Electrospray

APCI

Deflector plates



This power supply provides up to  $\pm 8\text{kV}$  for electrospray & APCI applications. Output polarity can be remotely changed by control pin voltages. As the unit does not use high voltage relays the polarity can be repeatedly changed at high speed without reducing the life of the unit. The power supply can be operated under current control in electrospray & APCI applications in mass spectrometers. Please consult the factory for special variants of this supply including higher speed versions, for volume applications.

### Electrical Specification

Input voltage:	$+24\text{V d.c. } \pm 0.5\text{V at } 0.7\text{A}$ & $-15\text{V d.c. } \pm 0.5\text{V at } 0.02\text{A}$ .				
Output Voltage:	$\pm 5\text{kV}$ limited to $500\mu\text{A}$ in Voltage Mode, $\pm 8\text{kV}$ at $35\mu\text{A}$ in Current mode.				
Control:	<table><tr><td>Vctrl Mode</td><td>0 to +10V gives 0 to <math>\pm 5\text{ kV}</math> limited to <math>500\mu\text{A}</math></td></tr><tr><td>Ictrl Mode</td><td>0 to +10V gives 0 to <math>\pm 35\mu\text{A}</math> sourced from <math>\pm 8\text{ kV}</math>.</td></tr></table>	Vctrl Mode	0 to +10V gives 0 to $\pm 5\text{ kV}$ limited to $500\mu\text{A}$	Ictrl Mode	0 to +10V gives 0 to $\pm 35\mu\text{A}$ sourced from $\pm 8\text{ kV}$ .
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Voltage Monitor:	0 to $\pm 10\text{V}$ represents 0 to $\pm 5\text{kV}$ , $\pm 5\%$ . Source resistance $400\text{k ohm}$ .				
Polarity:	Reversible selection is by grounding of appropriate control lines. (Current less than $25\text{ mA}$ .)				
Line regulation:	$< 100\text{ppm}$ for $1\text{V}$ change in input voltage.				
Load regulation:	$< 100\text{ppm}$ for $10\%$ to full load.				
Ripple:	$< 1\text{ volt peak to peak}$ .				
Temperature co-efficient:	$< 150\text{ppm/ } ^\circ\text{C}$				
Operating temperature:	$0\text{ }^\circ\text{C}$ to $+45\text{ }^\circ\text{C}$ .				
Current Monitor (pin 7):	0 to +10V represents 0 to $\pm 35\mu\text{A}$ . Source resistance $10\text{k ohm}$ . Tol $\pm 5\%$ .				

### Mechanical Specification

Size:	$160\text{mm} \times 145\text{mm} \times 48\text{mm}$ .
Output cables:	By flying lead type URM43 length $0.5\text{ metres}$ .
Input Connector:	10 pin Molex.

Connections:

Pin 1	Mode control - +24V = Current Mode 0V or o/c = Voltage Mode
Pin 2	+24V DC
Pin 3	Voltage Monitor o/p
Pin 4	-15V DC supply
Pin 5	V control i/p
Pin 6	-ve O/P Polarity select – to 0V
Pin 7	Current Monitor o/p
Pin 8	+ve O/P Polarity select – to 0V
Pin 9	Signal 0V
Pin 10	Power 0V