



- **$\pm 8\text{kV}$ 25ms Polarity Reversing Speed**
- **Precision Analog Voltage and Current Controls**
- **Precision Analog Voltage and Current Monitors**
- **High Stability**
- **Low Ripple and Noise**
- **High Voltage Inhibit Control**
- **RoHS Compliant**

Spellman's RoHS compliant MX8 Plus is a well-regulated high performance fast reversible supply featuring a 25ms "hot switchable" polarity reversing capability.

The MX8 Plus's low ripple specification is typical of the topologies that make Spellman High Voltage your ideal choice for mass spectrometry applications; especially security detection systems, dynodes, sample ionisation as well as capillary electrophoresis and electrostatic printing applications. The MX8 has been designed especially for EI and APCI applications.

The MX8 Plus can be easily tailored to an OEM's requirement, such as improved ripple performance, or different voltage and/or current capabilities.

TYPICAL APPLICATIONS

Mass Spectrometry
Capillary Electrophoresis
Electrostatic Printing

SPECIFICATIONS

Input Voltage:

+24Vdc, $\pm 10\%$

Input Current:

<0.5A nominal continuous
<1.2A peak during reversing

Output Voltage:

0V to $\pm 8\text{kV}$ (see note 1)

Output Current:

100 μA

Output Polarity:

Bipolar

Voltage Regulation:

Line: $< \pm 0.1\%$ for $\pm 10\%$ input voltage change
Load: $< 0.1\%$ for 0 to full load

Current Regulation:

Line: $\pm 0.1\%$ for +1V input voltage change
for any load condition
Load: $\pm 0.1\%$ for full load to short circuit

Ripple:

$< 0.1\%$ p-p @ 100 μA

Temperature Coefficient:

$\leq 100\text{ppm}$ per degree C

Environmental:

Temperature Range:
Operating: 5°C to 45°C
Storage: -35°C to 85°C
Humidity:
10% to 85%, non-condensing

Stability:

0.05% per hour after 1 hour warm up

Polarity Reversal Time:

$< 25\text{ms}$ from command to 90% into 100pF load capacitance
(see note 2)

Protection:

Arc and short circuit protected

Output Voltage Limit:

Output voltage must not exceed $\pm 8\text{kV} \pm 250\text{V}$
under any input or output conditions

Dimensions:

1.48" H X 3.23" W X 9.45" D (37.6mm X 82mm X 240mm)

Weight:

Approximately 3.3 pounds (1.5kg)

Input Connector:

14 way Molex housing p/n 39-01-2140 or
similar with female terminals. Cable length 508mm

Output Connector:

Alden F303RX12, mating connector not provided

Regulatory Approvals:

Compliant to EEC EMC Directive. Compliant to EEC
Low Voltage Directive. UL/CUL recognized file E227588.
RoHS compliant.

Note 1: Linearity not guaranteed below 200V. Maximum offset $\pm 20\text{V}$ when programmed to zero or disabled using remote enable.

Note 2: Unit incorporates circuitry to minimize the effects of low programmed current on reversing time. Polarity reversal time applies when current is programmed to 3 μA or above.

MX8 PLUS 14 PIN SOCKET

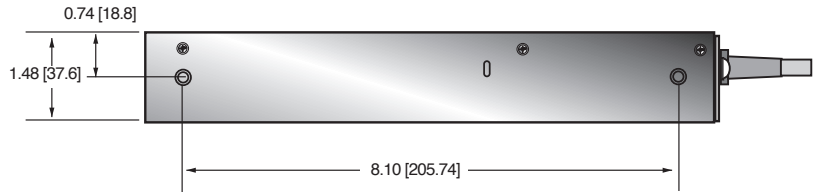
PIN	SIGNAL
1	+24Vdc Input
2	Chassis and 24Vdc Ground
3	Enable/Inhibit Input
4	8kV Voltage Monitor output
5	Voltage Control Input
6	Current Monitor Output
7	Current Control Input
8	Polarity Control Input
9	Analog Ground
10	Current/Voltage Control Indicator
11	N/C
12	N/C
13	N/C
14	N/C

How to Order:

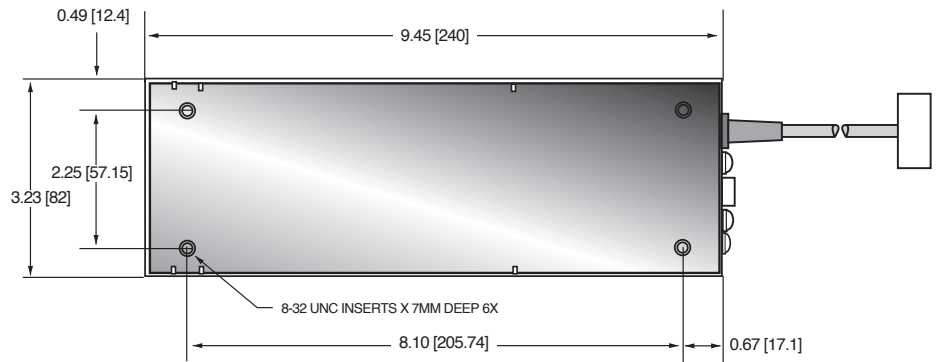
Standard: PART NO.: MXP8PN24

DIMENSIONS: in.[mm]

SIDE VIEW



TOP VIEW



FRONT VIEW

