



- **±8KV 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, ±10%

#### Input Current:

<0.5A nominal continuous  
<1.2A peak during reversing

#### Output Voltage:

0V to ±8kV (see note 1)

#### Output Current:

100µA

#### Output Polarity:

Bipolar

#### Voltage Regulation:

Line: <±0.1%% for ±10% input voltage change  
Load: <0.1% for 0 to full load

#### Current Regulation:

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

#### Ripple:

<0.1% p-p @ 100µA

#### Temperature Coefficient:

≤100ppm 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:

<25ms 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 ±8kV ±250V  
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 F303D24

#### Regulatory Approvals:

Compliant to 2004/108/EC, the EMC Directive and  
2006/95/EC, the Low Voltage Directive. Compliant to  
2002/95/EC, RoHS.

Note 1: Linearity not guaranteed below 200V. Maximum offset ±20V 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 3µA or above.

### MX8 PLUS 14 PIN SOCKET

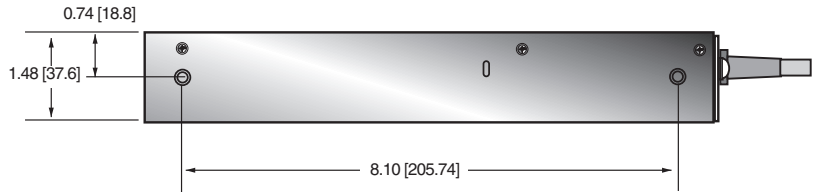
| PIN | SIGNAL                            |
|-----|-----------------------------------|
| 1   | +24Vdc Input                      |
| 2   | Chassis and 24Vdc Ground          |
| 3   | Enable/Inhibit Input              |
| 4   | 8kV Voltage Monitor output        |
| 5   | Voltage Control Input             |
| 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:

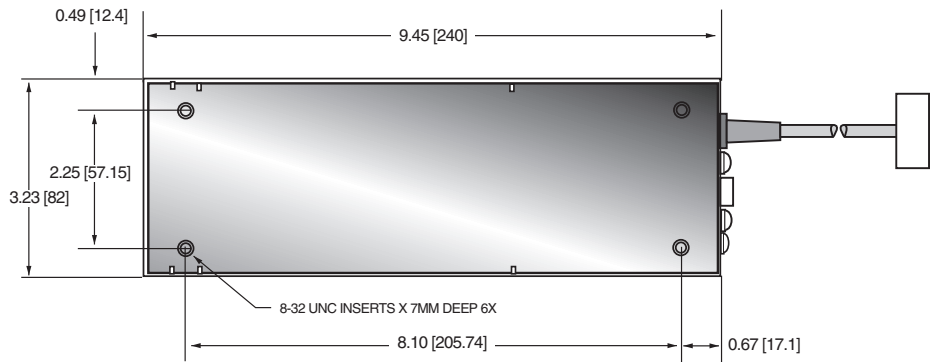
Standard: PART NO.: MXP8PN24

DIMENSIONS: in.[mm]

#### SIDE VIEW



#### TOP VIEW



#### FRONT VIEW

