



Spellman's MXR Series are well-regulated high performance DC-DC converters. The MXR's low ripple specification makes it ideal for Mass Spectrometry and electron microscopes. The MXR20 is rated at 20kV @ 300uA and MXR30 is rated at 30kV @ 300uA. Both are packaged in a shielded metal enclosure. These units feature a logic signal input to control output polarity reversal. A HV inhibit feature, along with voltage and current monitors are provided. Easily customized to meet OEM requirements, the MXR Series can be provided with current control, improved ripple performance and higher voltage and current capabilities.

TYPICAL APPLICATIONS

Mass Spectrometry
Electron Microscopes
Capillary Electrophoresis
Electrostatic Printing

OPTIONS

/DDC 2 RS-232
/LL#### mating HV cable length specified in mm

SPECIFICATIONS

Input Voltage:

24Vdc ($\pm 10\%$)

Input Current:

1.25A

Output Voltage:

$\pm 20V$ to $\pm 20kV$ (MXR20)

$\pm 30V$ to $\pm 30kV$ (MXR30)

Output Current:

300 μ A

- **Hot Switchable Polarity Reversible within 2s settling to <3ppm**
- **Remote Polarity Reversal and HV Inhibit**
- **Voltage and Current Monitor Outputs**
- **Arc and Short Circuit Protected**
- **Well Regulated, Low Ripple, High Stability**
- **UL Recognized**
- **OEM Customization Available**

Voltage Regulation:

Load: 50ppm of maximum output voltage for a no load to full load change

Line: <20ppm of maximum output voltage for a 5% input line change

Programming and Monitor Accuracy:

$\pm 2\%$ Voltage Programming/Monitor

Ripple:

10ppm

Stability:

1hr = 10ppm max. after 1 hr warm-up

8hrs = 20ppm max. after 1 hr warm-up

Temperature Coefficient:

10ppm/ $^{\circ}$ C

Reversing Time:

2s for +20kV to -20kV or +30kV to -30kV settling to <3ppm, faster versions are available

Environmental:

Temperature Range:

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

Storage: -40 $^{\circ}$ C to 85 $^{\circ}$ C

Humidity:

10% to 90%, non-condensing

Cooling:

Convection cooled

Dimensions:

2.05" H X 8.47" W X 9.13" D (52mm X 215mm X 230mm)

Weight:

Approximately 8.80 pounds (4.0kg)

Input Connectors:

Power: 2 way Molex Mini-fit Jr connector

Digital: 10 way 'IDC Ribbon cable' connector

Analog: 12 way Molex KK5.08 series connector

Output Connectors:

Standard output is GES HB30 receptacle. Mating cable is specified by adding /LL#### after model number, where #### is cable length in millimeters.

Regulatory Approvals:

Compliant to EEC EMC Directive. Compliant to EEC Low Voltage Directive. RoHS Compliant.

MXR POWER VIA 2 WAY MOLEX

PIN	SIGNAL
1	+24Vdc Input
2	Ground return for +24Vdc

MXR DIGITAL INPUT— 10 WAY IDC RIBBON CONNECTOR

PIN	SIGNAL
1	Transmit data (output) with respect to pin 1
2	Serial signal ground return (if required)
3	Receive data (input) with respect to pin 2
4	N/C
5	N/C
6	N/C
7	Interlock opto-isolator input
8	Interlock opto-isolator signal return
9	Polarity change signal opto-isolator input
10	Polarity change signal opto-isolator signal return

MXR ANALOG INPUT— 12 WAY MOLEX KK5.08 CONNECTOR

PIN	SIGNAL
1	Current monitor output
2	+24Vdc Input
3	Voltage monitor output
4	N/C
5	N/C
6	N/C
7	Voltage program input
8	Polarity set input
9	Signal ground
10	+24Vdc return
11	N/C
12	Polarity status output

How to Order:

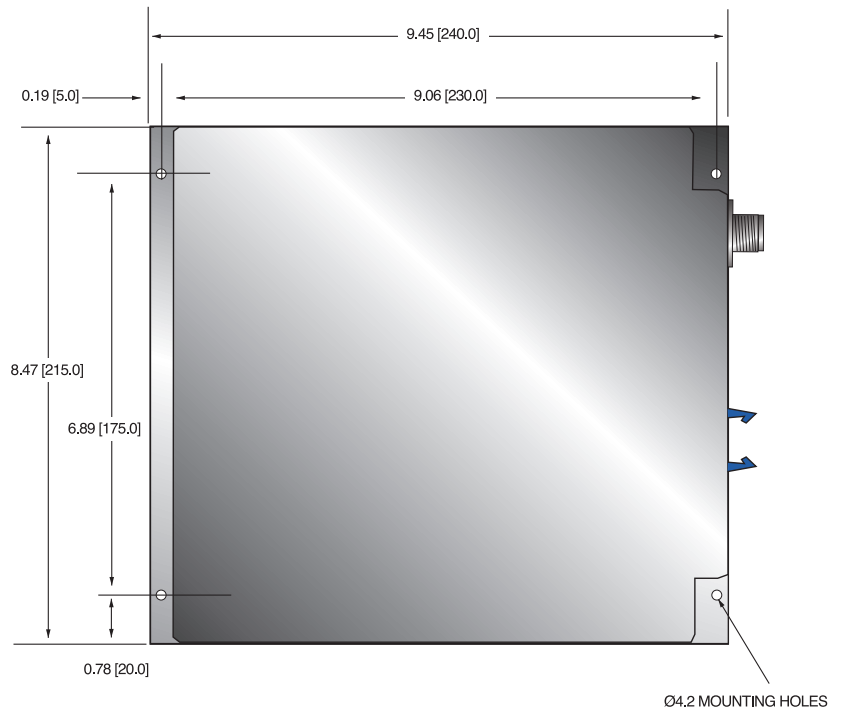
Standard: PART NO.: MXR20PN24
PART NO.: MXR30PN24

DIMENSIONS: in.[mm]

SIDE VIEW



TOP VIEW



FRONT VIEW

