

XR SERIES

REGULATED DC/DC HIGH VOLTAGE POWER SUPPLIES

Compact, highly stabilized 28 VDC-input supplies with independent constant-voltage and constant-current control. Ground-referenced programming, monitoring, and interlock simplify system integration, while the vacuum-encapsulated high voltage section provides corona-free, long-term reliability.



1-60 kV

OUTPUT RANGE

60 W

RATED POWER

28 VDC

NOMINAL INPUT

15-pin

CONTROL INTERFACE

KEY CAPABILITIES

- Voltage and current programmable
- Constant-voltage / constant-current operation
- Voltage and current monitoring
- External high voltage interlock
- Arc-over and short-circuit protection

TYPICAL APPLICATIONS

- X-ray systems
- CRT displays and projection systems
- Photomultiplier bias
- Capacitor charging
- Laser systems

STANDARD MODEL GUIDE

Model	Output voltage	Output current
XR60-1	0-1 kV	0-60 mA
XR60-1.5	0-1.5 kV	0-40 mA
XR60-3	0-3 kV	0-20 mA
XR60-10	0-10 kV	0-6 mA
XR60-15	0-15 kV	0-4 mA
XR60-20	0-20 kV	0-3 mA
XR60-30	0-30 kV	0-2 mA
XR60-40	0-40 kV	0-1.5 mA
XR60-50	0-50 kV	0-1.2 mA
XR60-60	0-60 kV	0-1 mA

Select the model for the required output voltage. Add P or N for polarity, and add /24 when the 24 VDC input option is required.



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1-60 kV | UP TO 60 W

HIGH VOLTAGE SOLUTIONS

XR SERIES | 02

ELECTRICAL CHARACTERISTICS

Input	+28 VDC +/-10%
Alternate input	+24 VDC +/-10% version available; add /24 suffix
Output	Ten models from 1 to 60 kV, fixed positive or negative polarity
Voltage regulation	Load: 0.01% of output voltage, no load to full load; line: +/-0.01% for +/-10% input change
Current regulation	Load: 0.1% of output current from 0 to rated voltage; line: 0.05% of rated current over the specified input range
Ripple	0.1% peak-to-peak of output voltage
Temp. coefficient	0.01% per deg C in voltage or current regulation
Stability	0.02% per 8 hours

INTEGRATION AND CONTROL

- Pin 1: current program
- Pin 2: voltage program
- Pin 4: current monitor
- Pin 7: voltage monitor
- Pin 6: external interlock
- Pin 10: +10 V reference
- Pins 5, 11, and 12: signal common
- Pins 13 and 14: chassis ground

PHYSICAL AND ENVIRONMENTAL

Nominal enclosure	5 H x 9 L x 3 W in (12.7 x 23 x 7.6 cm); see drawing for exact dimensions
Control interface	15-pin D-subminiature
Power input	Terminal block
HV output	Re-entrant bushing with mating output cable; customer-specified connectors available
Construction	Vacuum-encapsulated silicone high voltage section
Polarity	Fixed positive or negative

CONFIGURATION NOTES

- Positive or negative polarity
- 24 VDC input option: add /24 suffix
- Customer-specified high voltage connector
- Application-specific cable and interface options
- RoHS-compliant version available

MODEL NUMBER FORMAT

XR60-[Voltage][Polarity][24]

EXAMPLE

XR60-10P/24 10 kV | Positive | 60 W | 24 VDC input

P = positive N = negative /24 = 24 VDC input

HIGH VOLTAGE SOLUTIONS

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Get in touch

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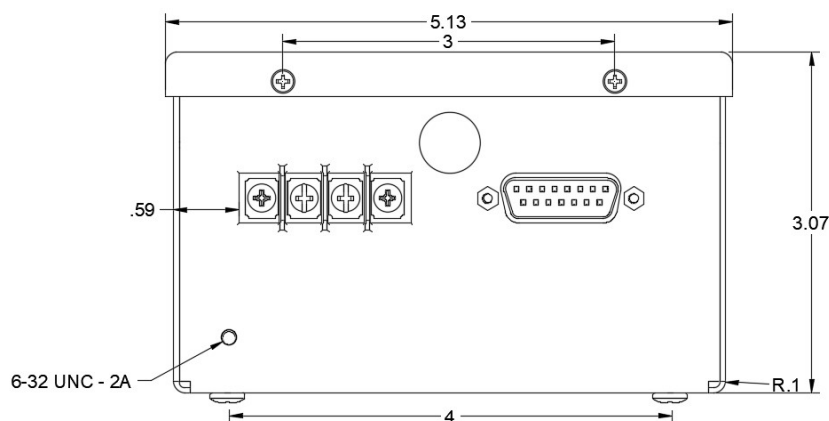
gammahv.com

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MECHANICAL DRAWINGS

Mechanical dimensions for the standard XR enclosure are shown below. Dimensions are in inches. Contact Gamma for assistance selecting the output connector and cable for your application.

FRONT VIEW



SIDE VIEW

