

3kW Microwave Generator, 2.45 GHz

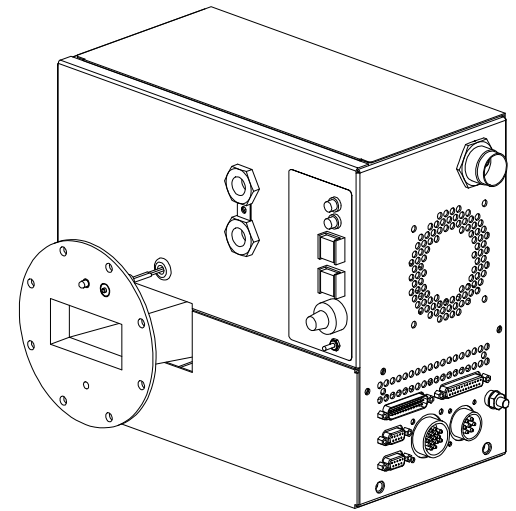
GERLING

Model GA4313
Model GA4323
Model GA4329

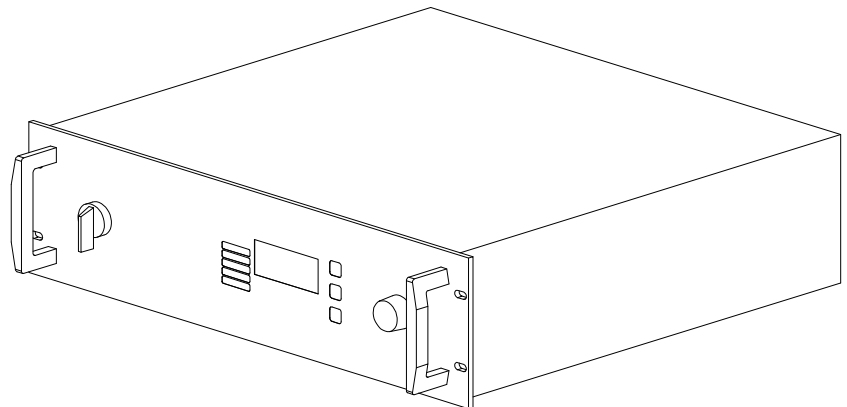
Models GA4313, GA4323 and GA4329 are complete 3kW microwave generator systems designed for use in laboratory research and process development applications. Consisting of separate rack mountable power supply and remote magnetron head modules, these user-friendly systems are easily installed and operated with a minimal amount of set-up. Local controls provide complete functionality conveniently near the work area as well as remotely via fully functional analog and digital (serial) remote control interfaces. Included with each system is a complete set of interconnect cabling between the two modules for safe and convenient setup and operation.

Serviceability of the magnetron head was a primary consideration in its design. Removal and replacement of the internal magnetron can be done in minutes using standard tools. The magnetron head is designed to use the Panasonic 2M265 magnetron but can also accommodate other water-cooled magnetrons available from multiple distributors. Connections are provided for interfacing with the model GA3301 Power Coupler Interface (available separately) for monitoring forward and reverse power. Model GA4313 also features the popular WR284 Q-D (quick-disconnect) waveguide flange that uses a convenient quick-release clamp (GAE model GA8410) for waveguide connections.

The power supply module combines state-of-the-art inverter (switch mode) technology with microprocessor controls to provide high performance in a compact and light weight package. An embedded microprocessor allows multi-functional user programmability.



Magnetron Head (GA4313 shown)



Power Supply Module

General Specifications:

Output Power (max)	3kW
Output Power Range	10-100%, continuously variable
Magnetron	Water-cooled Panasonic 2M265
Output Waveguide	GA4313 and GA4329: WR284 GA4323: WR340
Output Flange	GA4313: UG584/U w/Q-D taper GA4323: UG554/U GA4329: UG1725/U
Frequency	2450 MHz +/- 30 MHz
Cooling	Mag Head: Water @ 0.5 gpm min Power Supply: Internal fans
Input Line Power	190-240 VAC, 50/60 Hz, 3-phase, 19 Amp/phase max (17 A @ 208 VAC)
Remote Controls	Analog, RS-232, RS-485
Interlocks	Water flow, Waveguide flange, Access cover, Magnetron over-temp
Weight (approx.)	Mag Head: 25 lb (11 kg) Power Supply: 38 lb (17 kg)

Options:

- ◆ Alternate output waveguide flanges
- ◆ Arc detection

Accessories:

- ◆ Flange Hardware Kit, Model GA8409
(please see GA8409 specification for selection)
- ◆ Flange Clamp, Quick-Release, Model GA8410
- ◆ Coupler Power Interface, Model GA3301



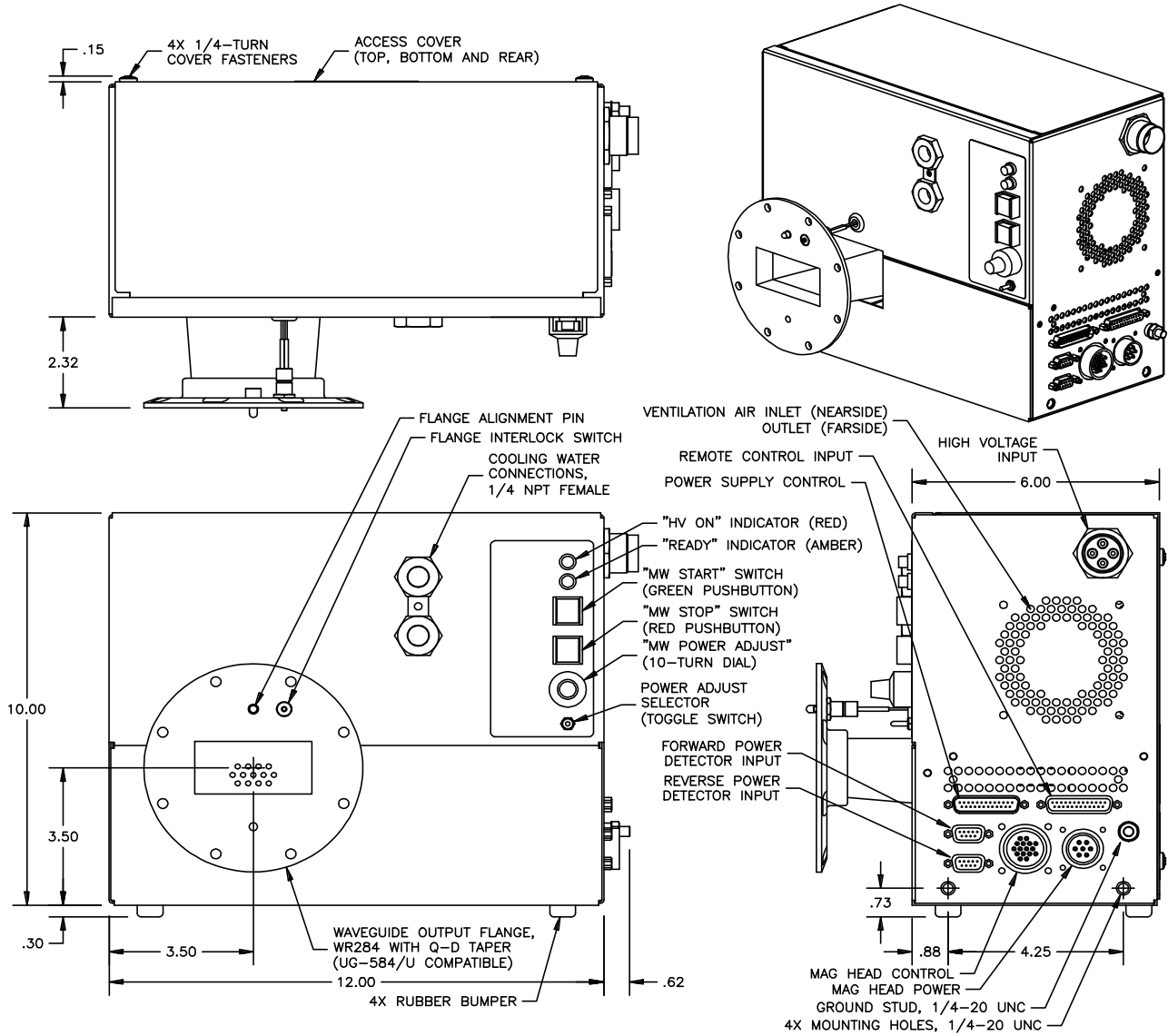
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PO Box 580816 ▪ Modesto, CA 95358 ▪ USA
Phone: +1-209-527-8960 ▪ Fax: +1-209-527-5385
E-mail: sales@2450MHz.com ▪ Web: www.2450MHz.com

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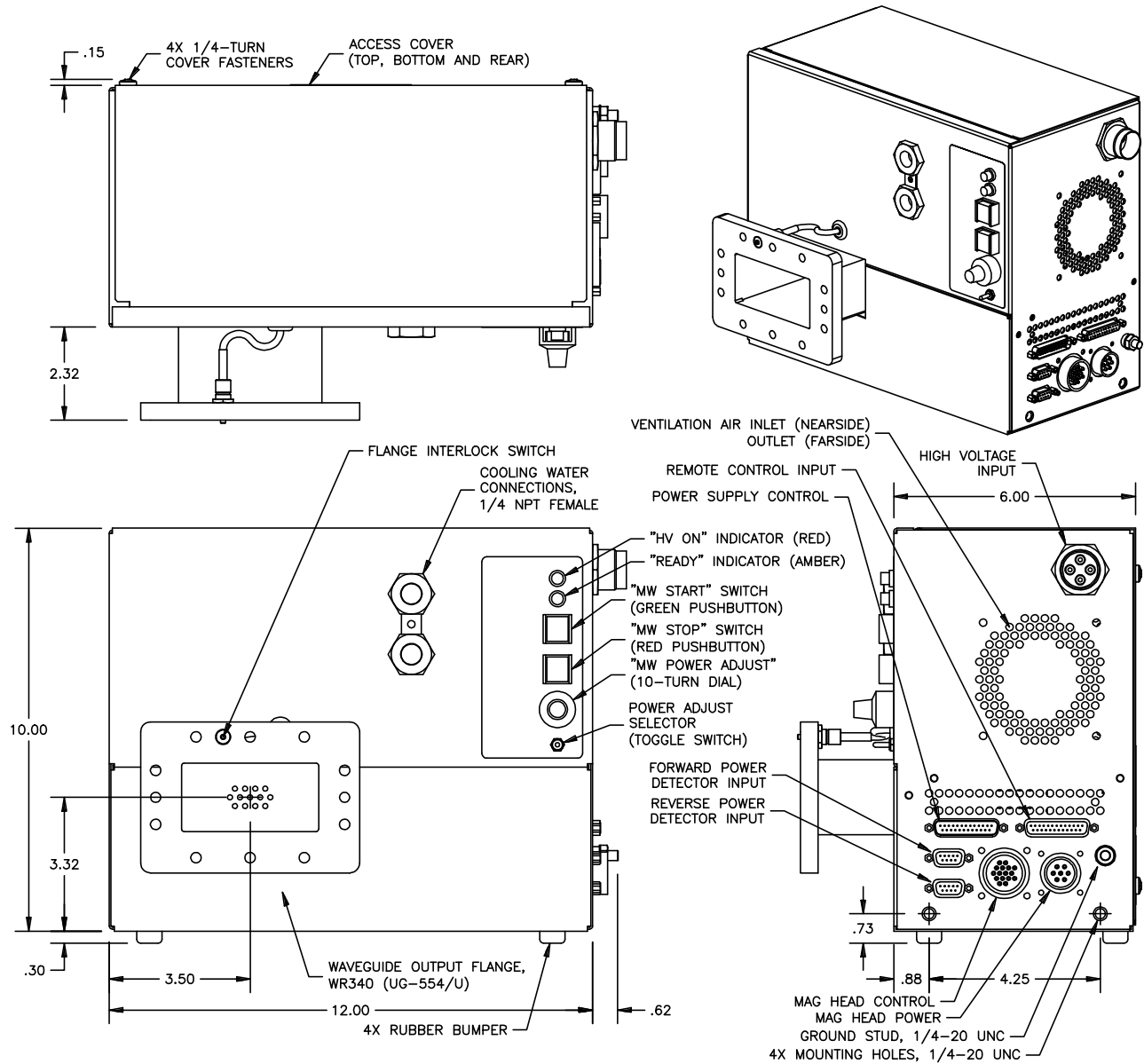


Model GA4313 Magnetron Head

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Model GA4313
Model GA4323
Model GA4329



Model GA4021 Magnetron Head



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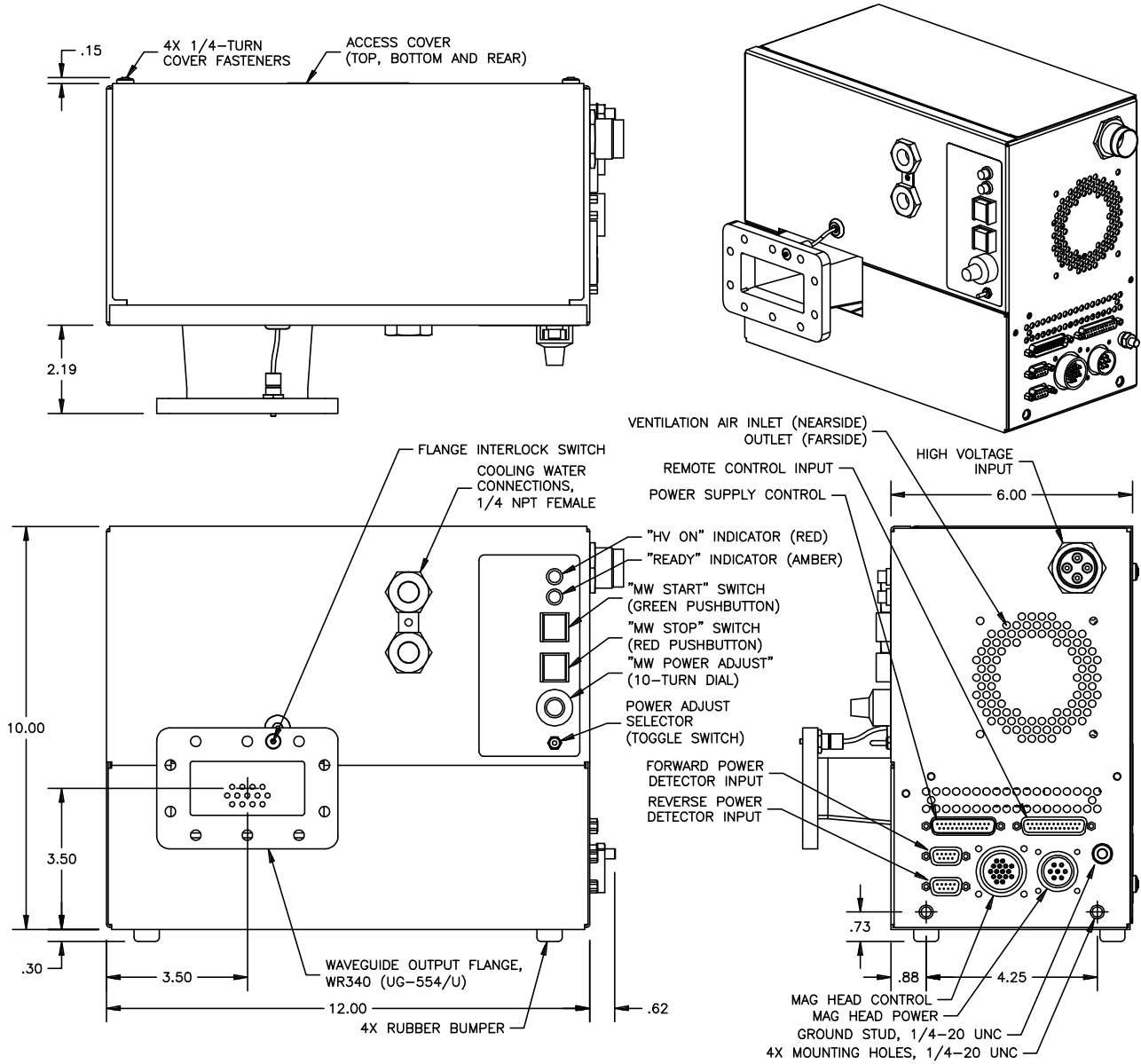
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All dimensions are in inches [millimeters].

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Model GA4027 Magnetron Head



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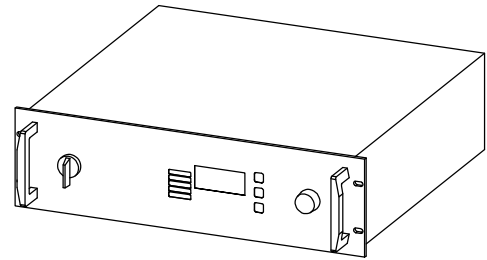
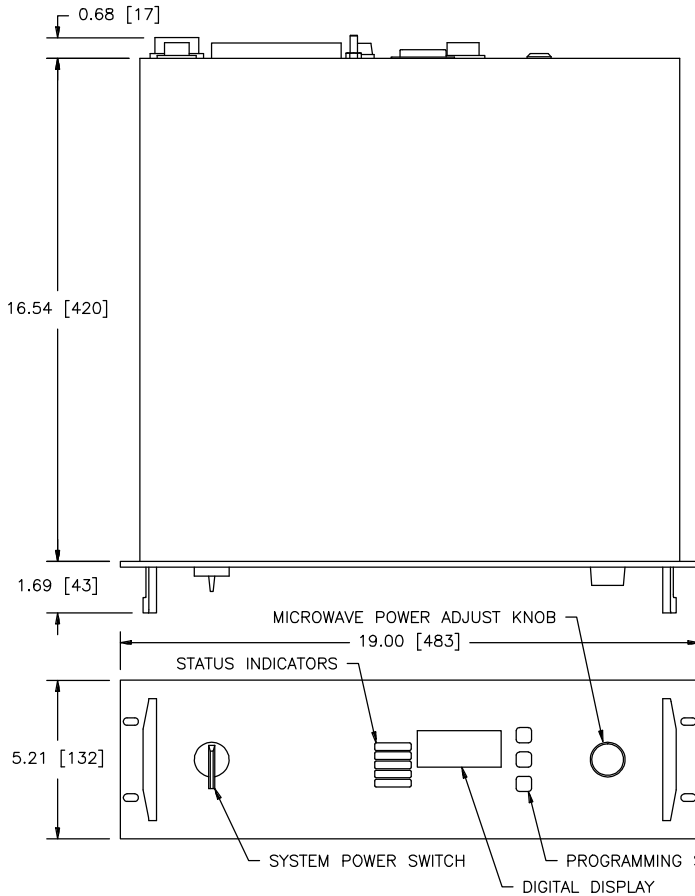
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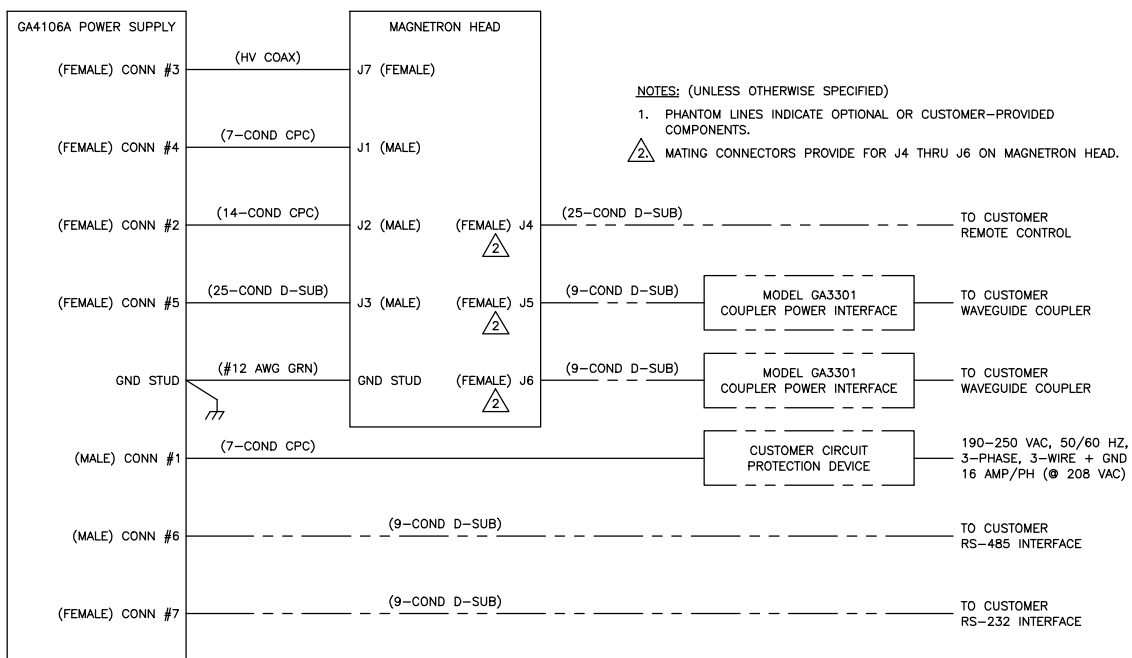
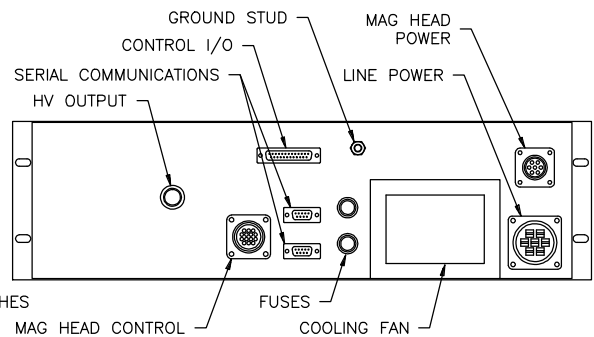
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MODEL GA4106A
 HIGH VOLTAGE POWER SUPPLY



System Interconnect Diagram



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