1.2kW Laboratory Microwave Generator, 2.45 GHz

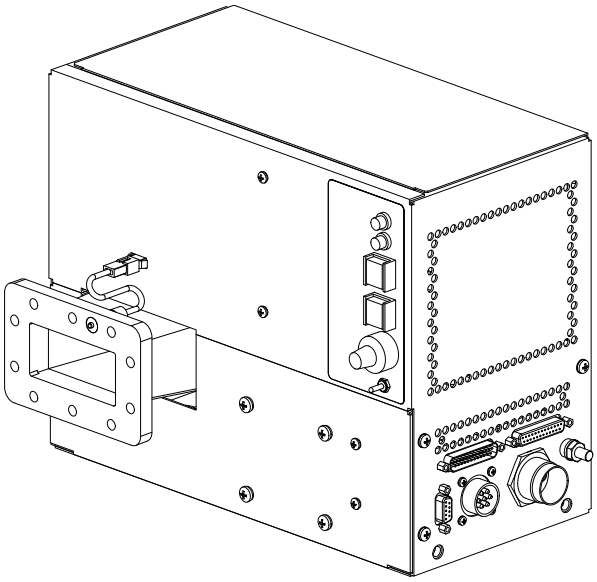
GERLING

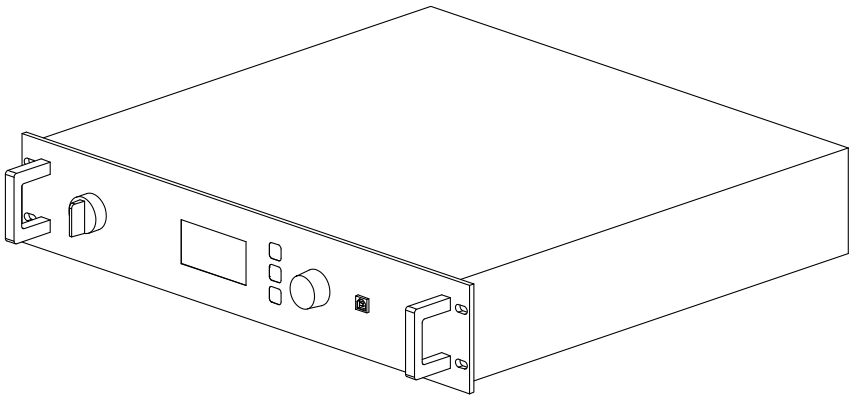
Model GA4348
Model GA4349

Models GA4348 and GA4349 are complete 1.2kW microwave generator systems designed for use in laboratory research and process development applications. Consisting of a rack mounted power supply and remote magnetron head, this user-friendly system is easily installed and operated with a minimal amount of set-up. Local controls provide complete functionality safely and conveniently near the work area as well as remotely via fully functional analog and digital (serial) remote control interfaces. Included with the system is a complete set of interconnect cabling between the two modules for safe and convenient setup and operation.

The power supply module combines state-of-the-art inverter technology with microprocessor controls to provide high performance in a compact and light weight package. The embedded microprocessor allows parametric user programmability and maintains precise and stable control of operational performance. Power factor correction circuitry ensures optimal operating efficiency.

Serviceability of the magnetron heads was a primary consideration in their design. Removal and replacement of the internal magnetron can be done in minutes using standard tools. Both are designed to use the Panasonic 2M137 magnetron which is available from multiple distributors.





General Specifications:

Output Power (max)	1.2kW
Output Power Range	10-100%, continuously variable
Output Ripple	<4% of full power
Regulation	<1% for +/- 10% line voltage variation
Magnetron	Water-cooled Panasonic 2M137
Output Waveguide	GA4348: WR284 GA4349: WR340
Output Flange	GA4348: UG1725/U GA4349: UG1713/U
Frequency	2450 MHz +/- 30 MHz
Cooling	Internal fans
Input Power	180-250 VAC, 50/60 Hz, 1-phase, 12 Amp max (@ 230 VAC)
Ambient Temperature	5—40 °C (41—104 °F)
Relative Humidity	80% (non-condensing) for temperatures up to 31 °C (88 °F), decreasing linearly to 50% at 40 °C (104 °F)
Remote Controls	Analog, RS-232 via USB
Interlocks	Waveguide flange; Access cover; Magnetron over-temp
Weight (approx.)	Mag Head: 20 lb (9 kg) Power Supply: 26 lb (12 kg)

Options:

- Arc detector
- Alternate flange and mounting styles
- Captive flange fasteners
- Custom cable set

Accessories:

- Flange Hardware Kit, Model GA8409
  (please see GA8409 specification for selection)

GERLING APPLIED ENGINEERING, INC.

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All dimensions are in inches [millimeters].

Updated 06JUL15

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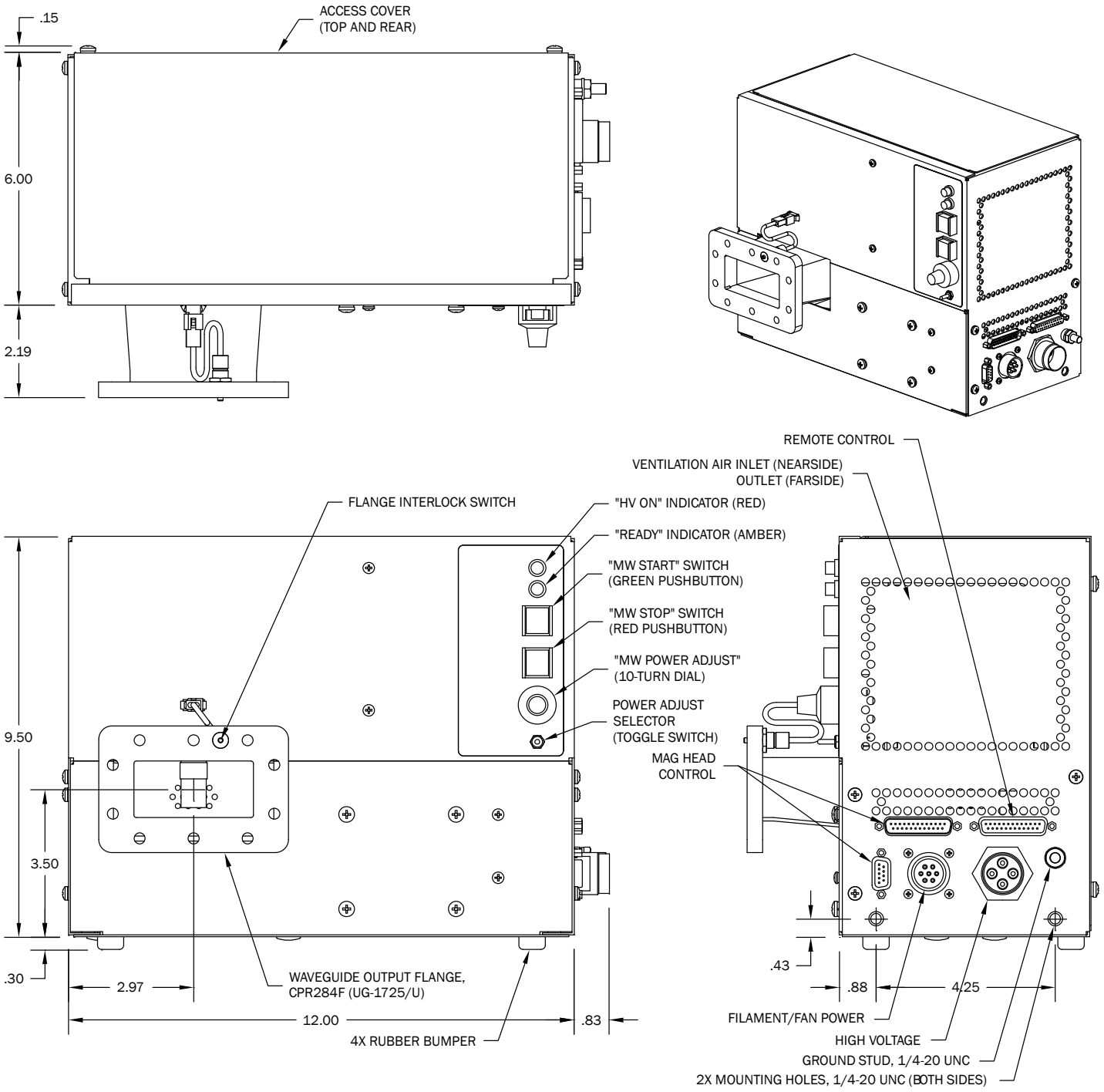

Model GA4348 Magnetron Head

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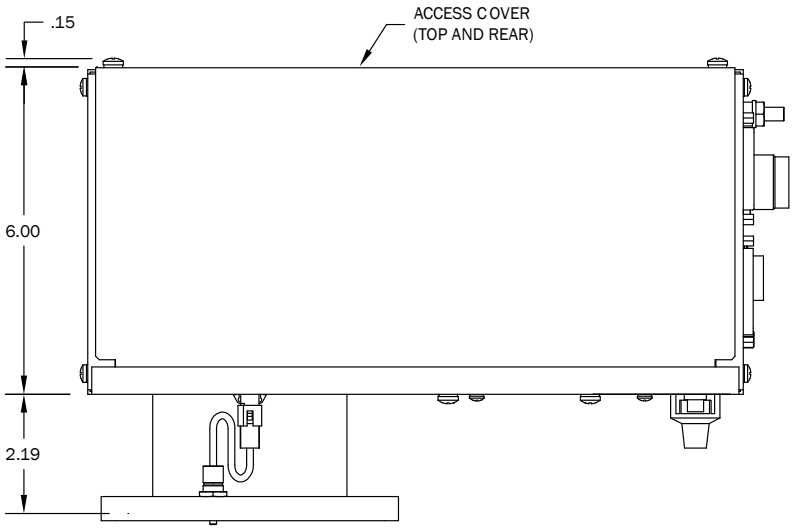

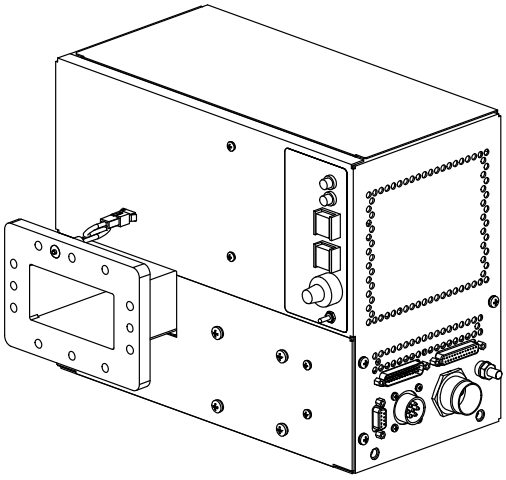

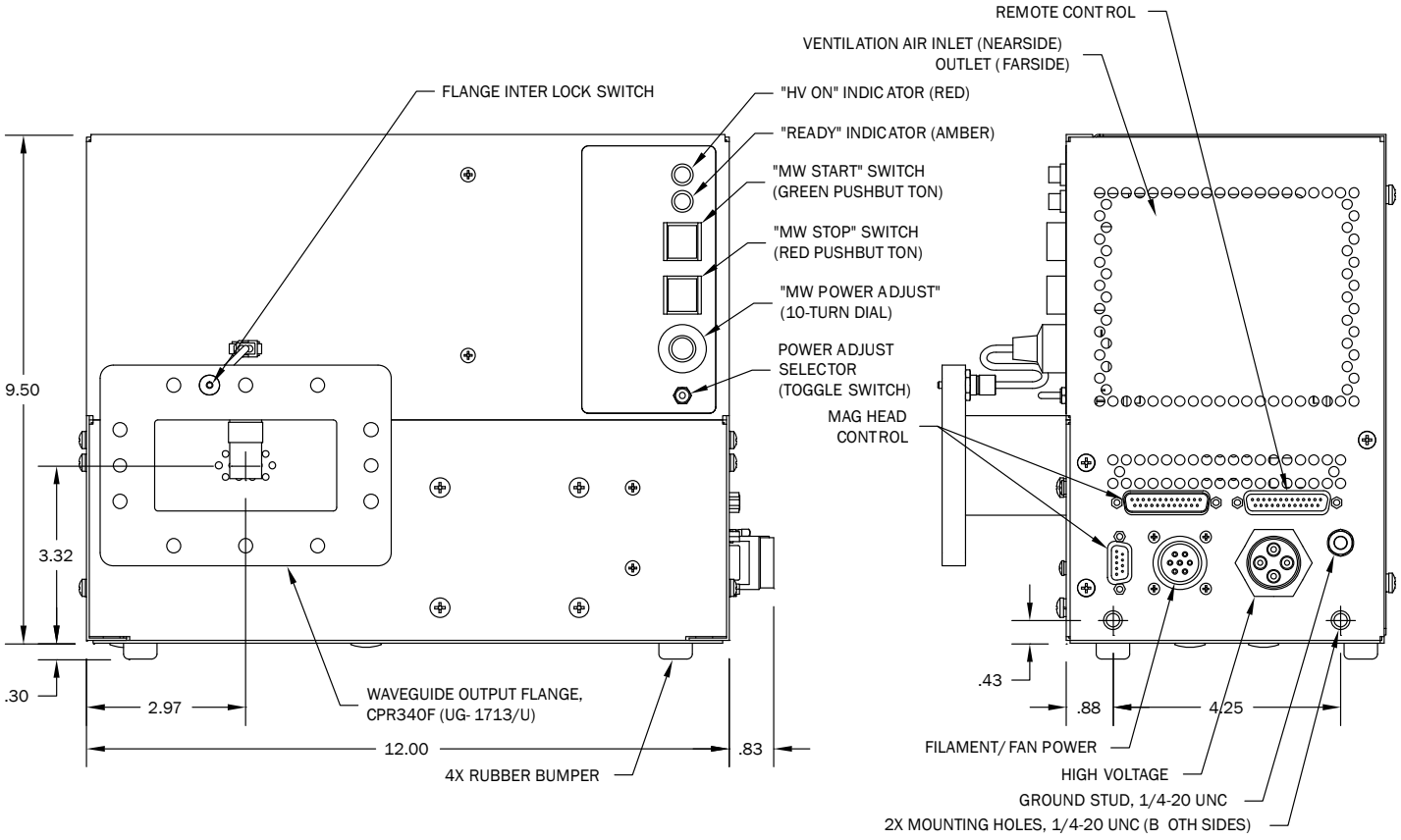

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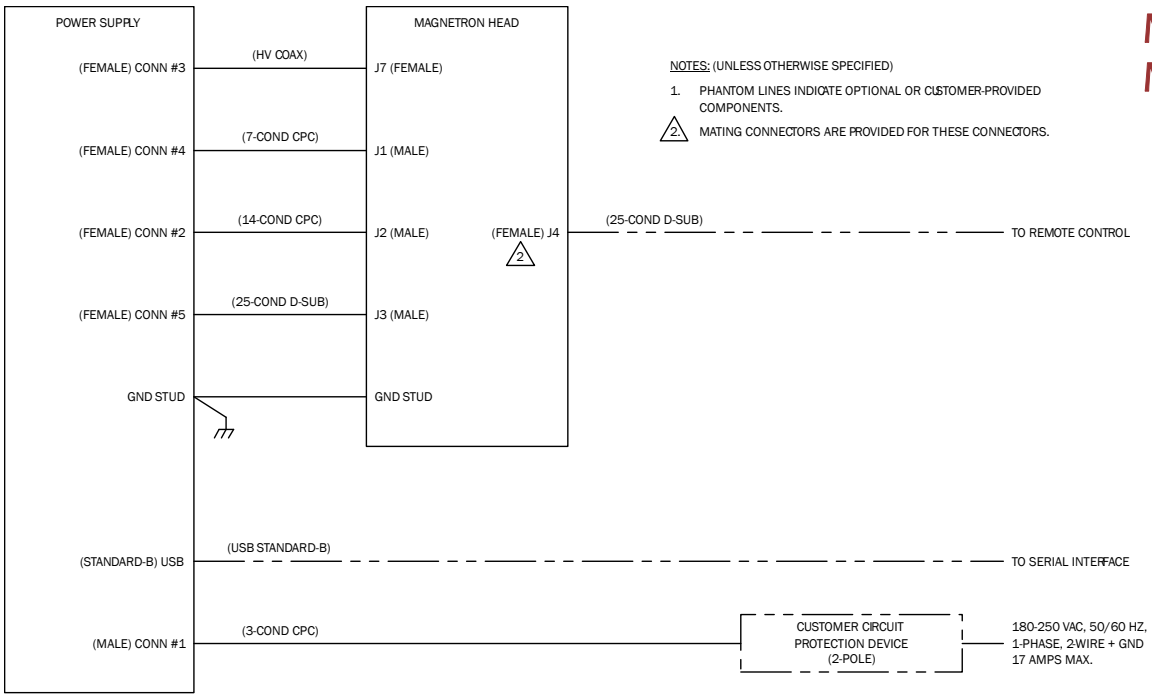
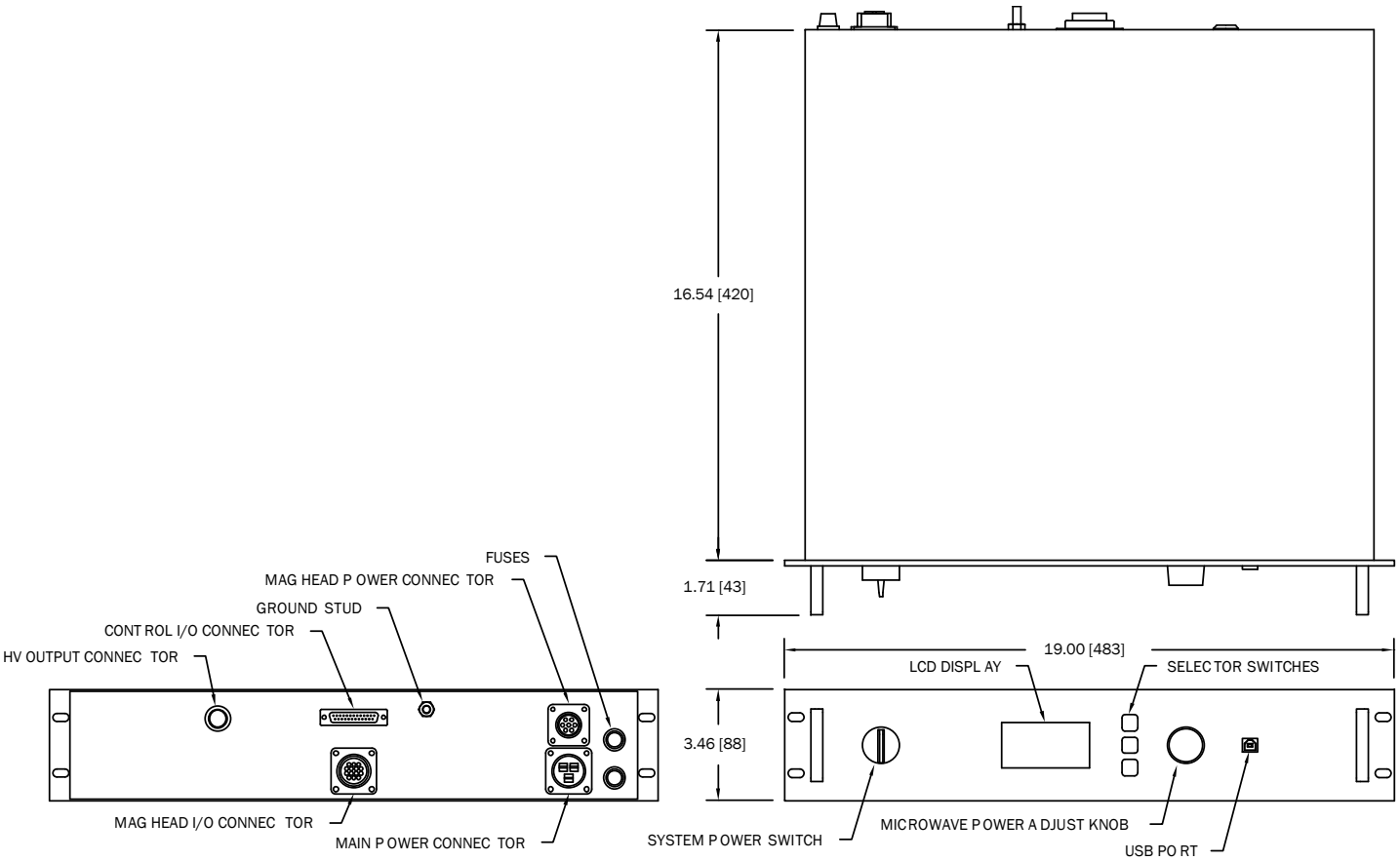


System Interconnect Diagram



Power Supply Module

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