

1.8kW Laboratory Microwave Generator, 2.45 GHz

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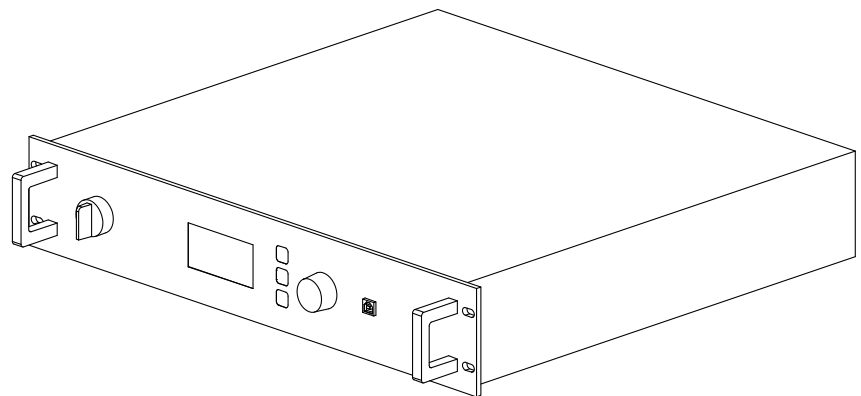
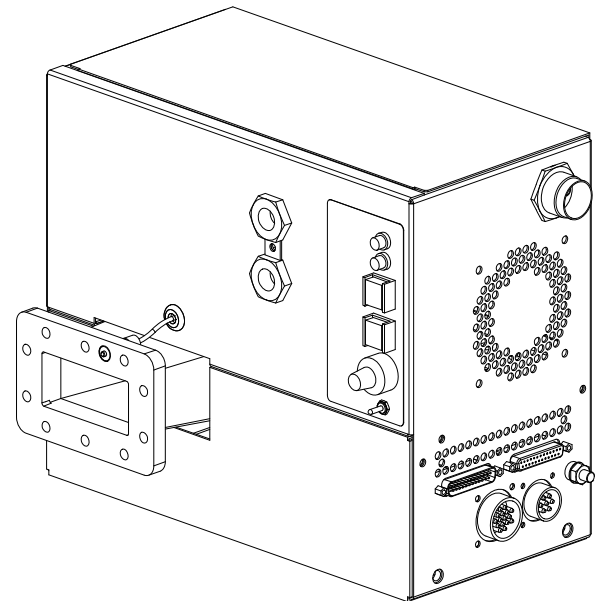
Model GA4343
Model GA4344

Models GA4343 and GA4344 are complete 1.8kW 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 power factor correction to provide high performance and efficient operation 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 head was a primary consideration in their design. Removal and replacement of the internal magnetron can be done in minutes using standard tools. Optional features are available to further enhance serviceability and reduce installation and maintenance costs.



General Specifications:

Output Power (max)	1.8kW
Output Power Range	10-100%, continuously variable
Output Ripple	<4.5% of full power
Regulation	<1% for +/- 10% line voltage variation
Magnetron	Water-cooled Hitachi 2M130
Output Waveguide	GA4343: WR284 GA4344 WR340
Output Flange	GA4343: UG1725/U GA4344: UG1713/U
Frequency	2450 MHz +/- 30 MHz
Cooling	Magnetron Head: 0.5 gpm water @ 95 °F max. inlet temp, 70 psig max. inlet pressure. Power Supply: Internal fans
Input Power	180-250 VAC, 50/60 Hz, 1-phase, 17 Amps max.
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; Water flow

Weight (approx.)

Mag Head: 20 lbs (9 kg)
Power Supply: 31 lbs (14 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)



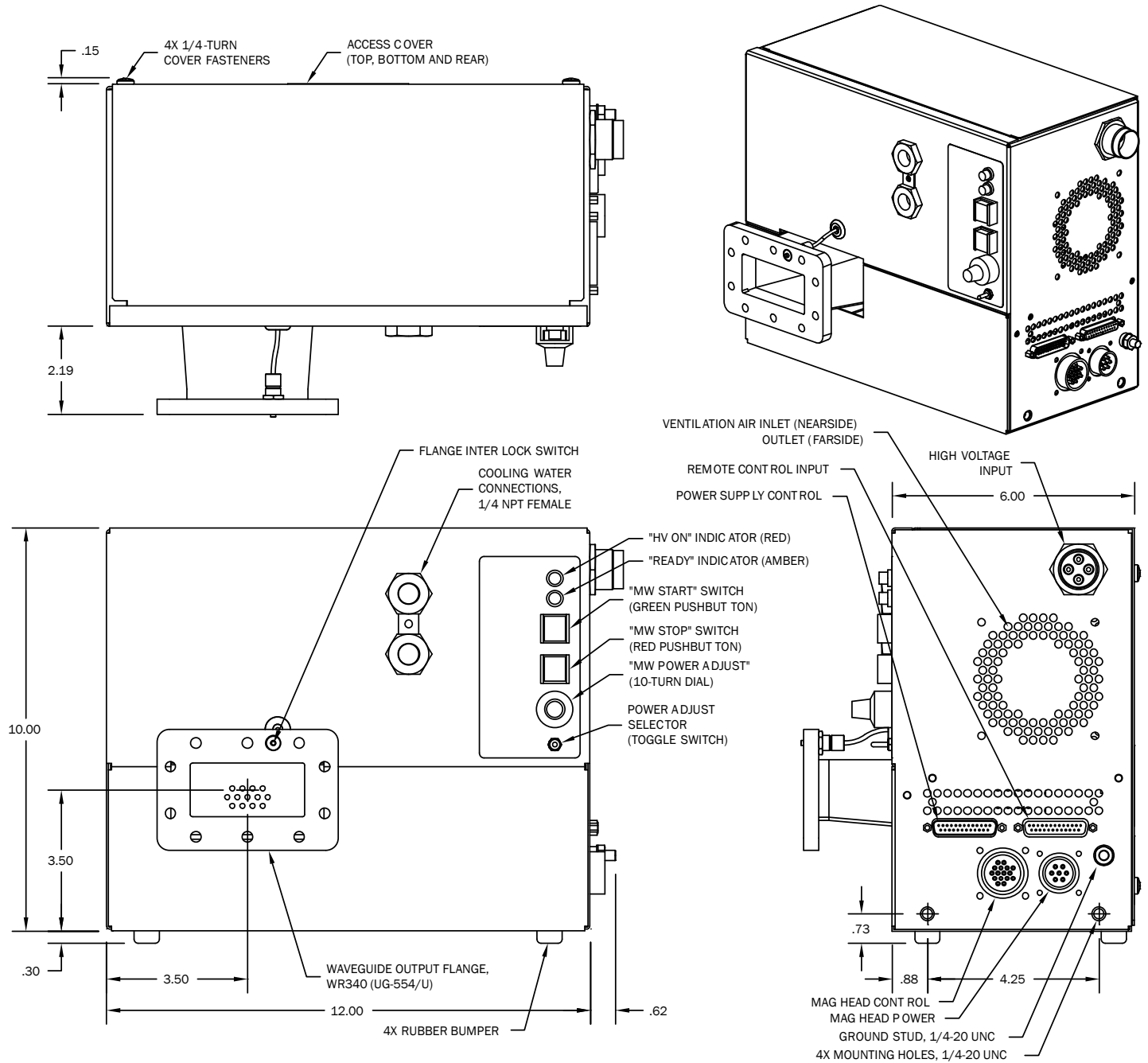
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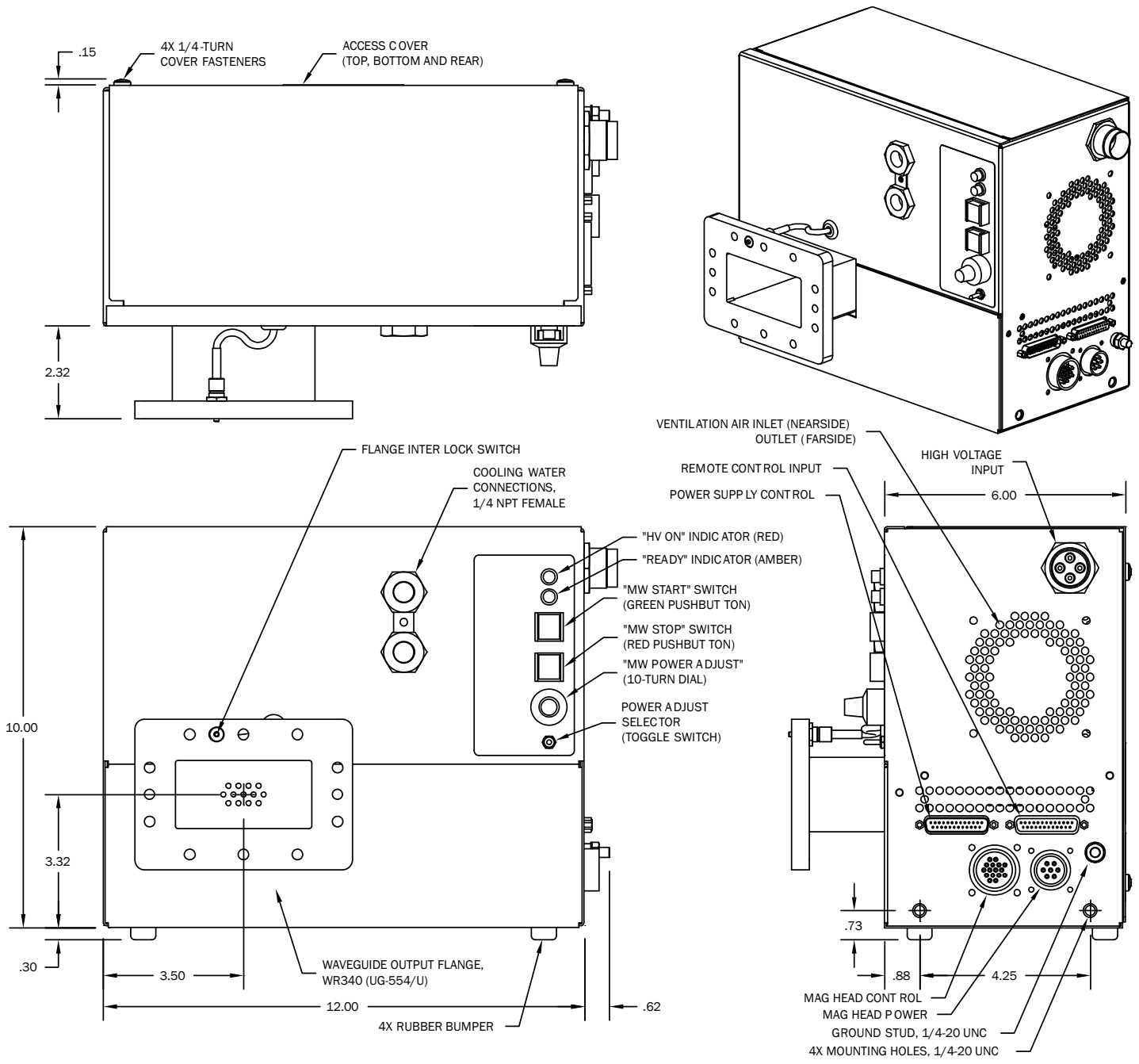


Magnetron Head Module, CPR284 (part of GA4343)

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Magnetron Head Module, WR340 (part of GA4344)



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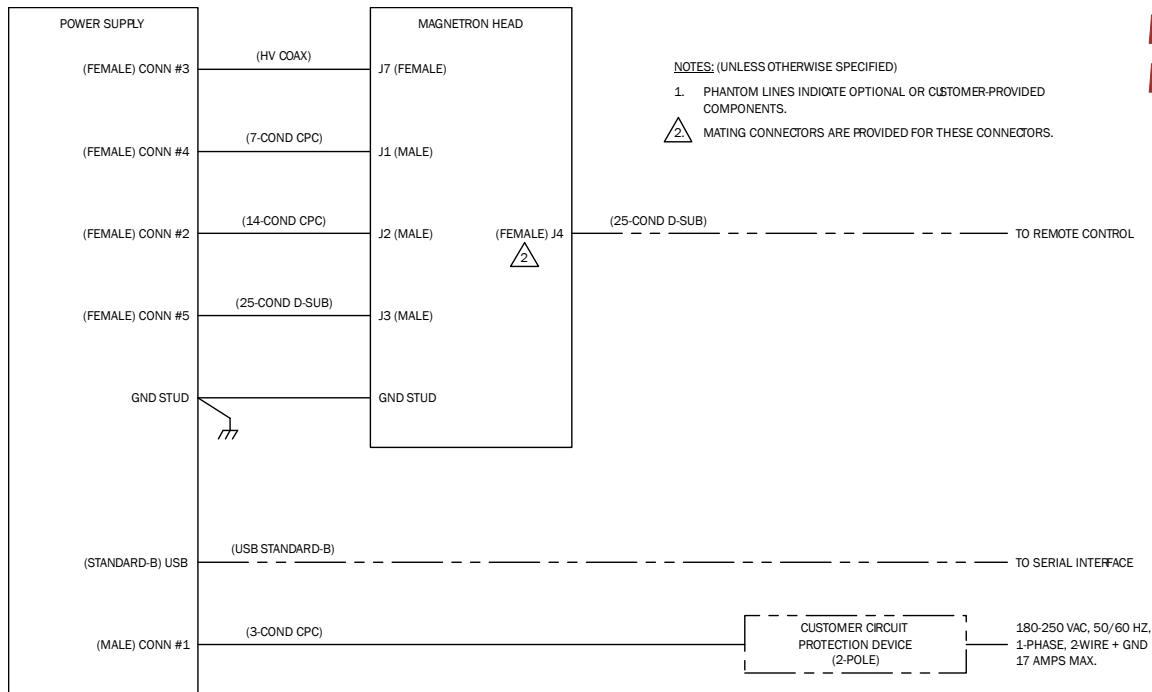
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All dimensions are in inches [millimeters].

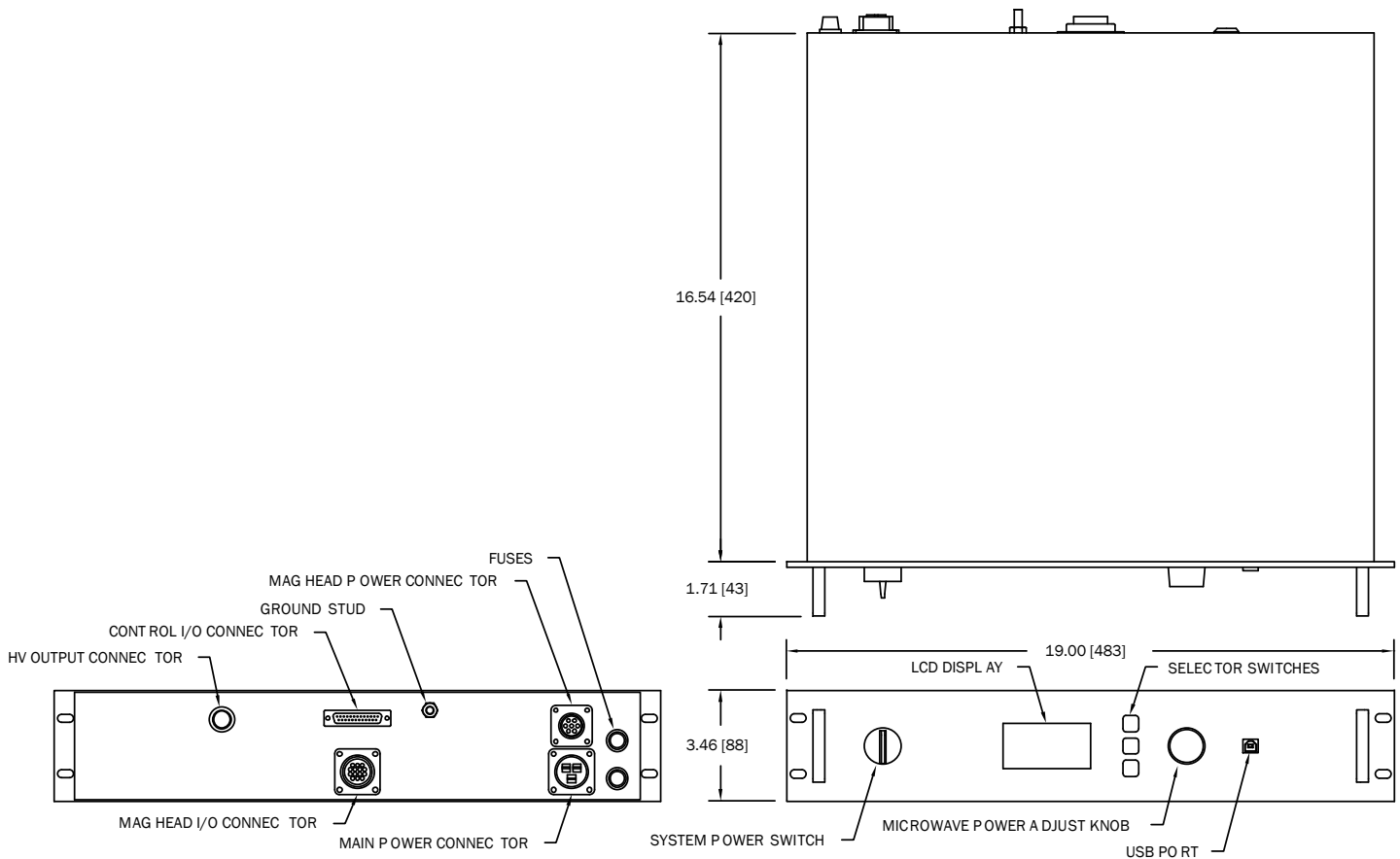
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System Interconnect Diagram



Power Supply Module



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