

# 1.8kW Pulsed Microwave Generator, 2.45 GHz, WR284 Q-D

GERLING

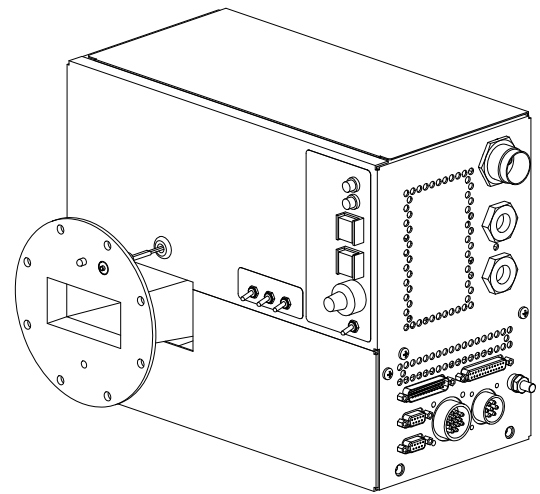
## Model GA4316

The model GA4316 microwave generator is designed to deliver microwave power at high pulse rates for a variety of laboratory and industrial microwave heating applications. The models consist of a rack mounted power supply, remote magnetron head and interconnecting cable set for a turnkey user-friendly system.

The magnetron head is designed for laboratory bench-top applications. Local control functions provide convenient and simple operation while the control interface enables use with remote manual or automated control systems.

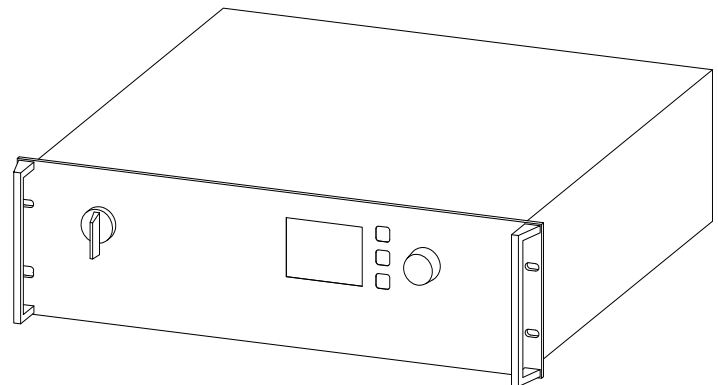
Installation, serviceability and operator safety were primary considerations in the design of this microwave generator system. Setup involves little more than positioning the power supply and magnetron head modules, attaching the waveguide and interconnect cables and plugging in the line power connector. Convenient mounting holes allow the equipment to be secured in place if necessary. Removal and replacement of the internal magnetron can be accomplished quickly using standard tools. The system is designed to comply with all regulatory requirements for emissions and operator safety when used in the laboratory.

The system modules are housed in attractive brushed stainless steel enclosures for a striking appearance and rugged durability. Included is a standardized 10 ft. cable set for connecting between the magnetron head and power supply (alternate lengths available on special order). Contact GAE for more detailed information on these and other available options and custom configurations.



### General Specifications:

|                    |   |
|--------------------|---|
| Output Power (max) | 1.8kW average, 8kW peak, continuously variable 10-100%  |
| Magnetron          | Water-cooled Panasonic 2M259  |
| Output Waveguide   | WR284   |
| Output Flange      | WR284 Q-D (UG-584/U compatible)   |
| Frequency          | 2.45 GHz +/- 30 MHz   |
| Cooling            | 0.5 gpm @ 35°C max inlet temp (dew point minimum inlet temp)  |
| Input Line Power   | 360-440 VAC, 50/60 Hz, 3-phase, 7.7 Amp max/phase (7 A @ 400 VAC)   |
| Pulse Mode         | Period: 100-2500 $\mu$ sec<br>On-time: 20-500 $\mu$ sec<br>Duty: 1-20 %   |
| Controls           | Main Power On-Off (circuit breaker)<br>Mw Start/Stop (pushbutton switches)<br>Mw Power Adjust (10-turn dial)<br>System Ready (Green indicator)<br>HV On (Red indicator)<br>Power Adjust Selector (toggle switch)<br>Pulse Mode Selector (toggle switch)<br>RS-232 Interface |



|                  |  |
|------------------|--|
| Interlocks       | Access cover, Magnetron cooling, Magnetron over-temp       |
| Construction     | Brushed stainless steel enclosures, aluminum waveguide     |
| Weight (approx.) | Mag Head: 24 lbs (11 kgm)<br>Power Supply: 44 lbs (20 kgm) |

### Accessories:

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



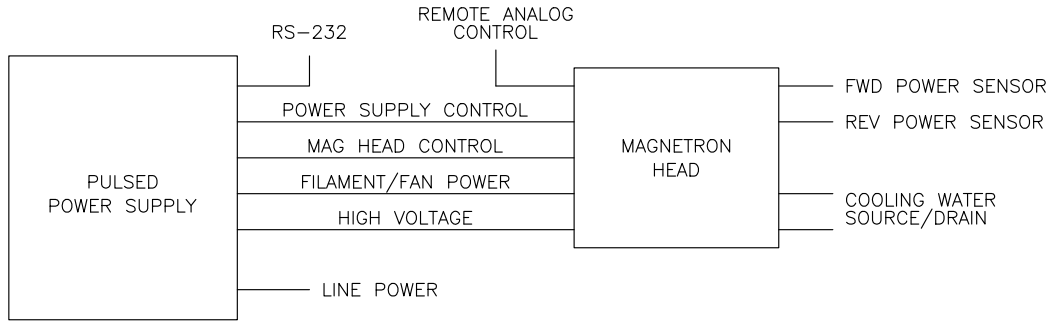
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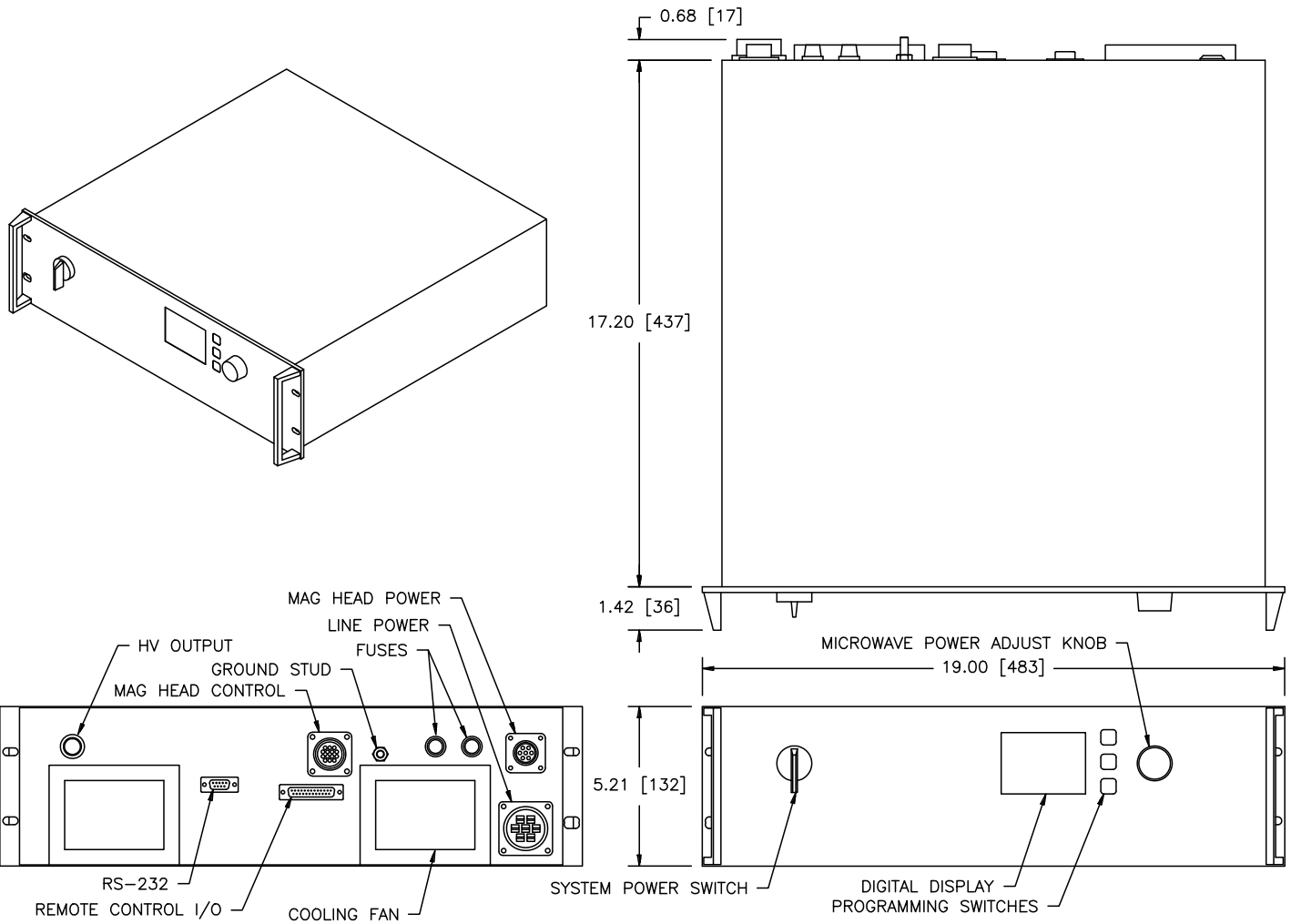
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INTERCONNECT DIAGRAM



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All dimensions are in inches [millimeters].

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