

Universal Waveguide Applicator, WR284

GERLING

Model GA6002A
Model GA6008

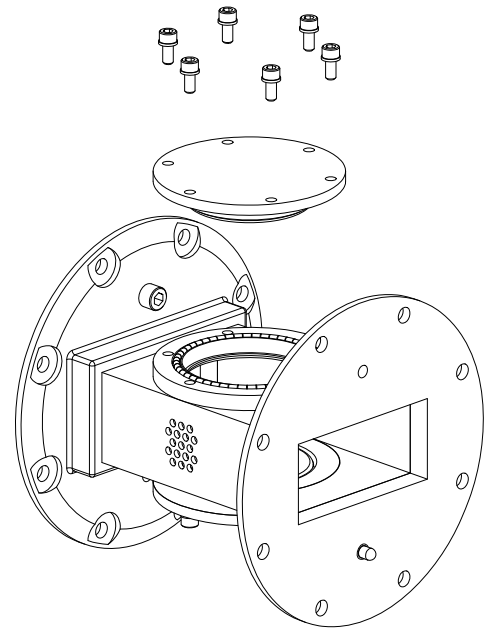
GAE has designed the Universal Waveguide Applicator (UWA) as a cost-effective means to fulfill the needs of a wide variety of laboratory heating requirements. The standardized waveguide chamber of the UWA can be used with standard or custom adapters (ordered separately) specially designed for heating specific materials. Typical applications include test tube samples, slabs, rods, fluids and plasmas.

The basic design of the UWA is that of a typical broadwall type waveguide applicator. Microwave energy propagates in the TE₁₀ mode which orients the electric field perpendicular to the adapter ports. The e-field varies symmetrically in a sinusoidal manner from a maximum at the center to zero at the side walls. Thus, heating is relatively uniform with respect to sample height but can vary for large widths.

The UWA can be used with a Dummy Load (e.g. model GA1204) for traveling wave heating applications or a Sliding Short Circuit (e.g. model GA1205) for resonant chamber heating. Depending on the application, typical configurations might also include directional couplers for power measurement (e.g. model GA3103 or GA3104) and tuners for impedance matching (e.g. model GA1009).

The UWA has two ports on opposite walls. Blank adapters are provided for each port and can be modified by the customer for specific applications. Standard adapters for various applications are also available. Contact GAE for more information on the UWA and standard adapters or design assistance on custom adapters.

To facilitate monitoring during heating, the UWA features perforations on one side of the waveguide for viewing and a threaded boss on the other side for mounting an IR sensor or camera. Model GA6002A also features the popular WR284 Q-D (quick-disconnect) round flange that uses the convenient single screw clamp (model GA8410) for waveguide connections.



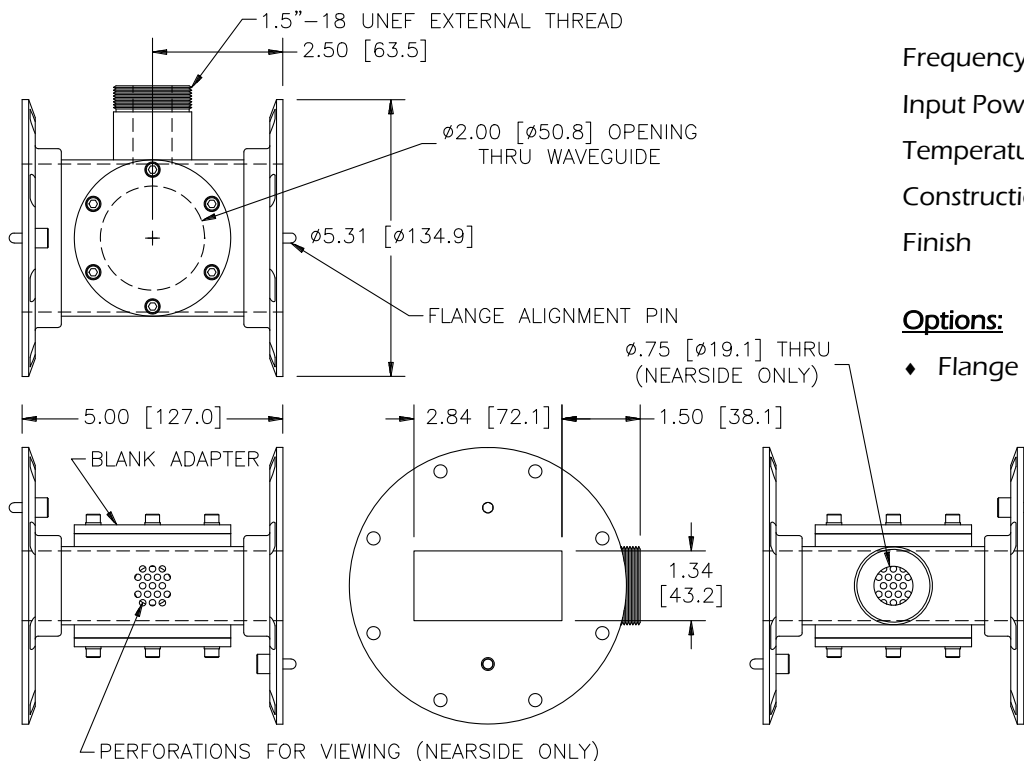
(Model GA6002A shown)

General Specifications:

Waveguide	WR284
Flanges	GA6002A: UG-584/U with Q-D taper GA6008: UG1725 (CPR)
Frequency	2450 MHz nominal
Input Power	3 kW continuous max.
Temperature	300°F (150°C) max.
Construction	Aluminum
Finish	Chemical conversion coating

Options:

- ◆ Flange interlock switches



(Model GA6002A shown)



GERLING APPLIED ENGINEERING, INC.

© 2003-2013 Gerling Applied Engineering, Inc.
PO Box 580816 • Modesto, CA 95358 • USA
Phone: +1-209-527-8960 • Fax: +1-209-527-5385
E-mail: sales@5800MHz.com • Web: www.5800MHz.com