The MatchBox™ Motorized Single-Stub Tuner is designed for OEM applications that require remote control of a single waveguide stub for impedance matching or power reflecting applications. Full control over the stub position is enabled via USB interface to the customer’s remote computer or process control system. The stub is operated by a high speed micro-stepper motor capable of moving the stub through its full length of travel within 100 ms or less.

The single stub tuner is intended primarily for either of two unique functions. For certain processes, impedance matching can be accomplished using a single tuning stub once the optimal stub location has been determined during process development. In other processes, such as in variable attenuation, microwave power can be intentionally reflected by controlling the depth of insertion. Contact GAE for additional information and advice regarding these functions.

**Preliminary Specifications:**

- **Waveguide:**
  - GA1026: WR284
  - GA1027: WR340
  - GA1028: WR430

- **Flange:** Flat CPR (rectangular) with 1/4-20 UNC tapped holes

- **Frequency:** 2450 MHz +/- 50 MHz

- **Power (continuous):**
  - GA1026: 3 kW
  - GA1027: 6 kW
  - GA1028: 10 kW

- **Stub Design:** Non-contacting 1/4-wave choke

- **Response Time:** <100 ms total

- **Control Interface:** USB, mini-B to A connector

- **Input Power:** 24 VDC, 2 Amps max

**Options:**
- Ethernet interface
- Manual adjustment
- Studs on flanges

**Accessories:**
- Flange Shim Set
  
  (GA8411, GA8412, GA8413)

**Dimensions:**

<table>
<thead>
<tr>
<th>DIM</th>
<th>GA1026/CPR284</th>
<th>GA1027/CPR340</th>
<th>GA1028/CPR430</th>
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