

## Basic Tips and Steps for Waveguide Care and Usage

### Waveguide Cleaning Steps:

1. Use compressed air to go over flange and inside waveguide to clear any possible debris
<i>*Best to complete these steps under a microscope. (6-10x magnification)</i>
2. Inspect flange and aperture area for any abnormalities or gouges.
3. Use denatured alcohol or isopropyl alcohol (>90%) to clean flange interface. If using a cotton swab ensure that no cotton fibers are left on aperture area.
<i>*Note: Not recommend using other solvents or cleaners.</i>
4. If contaminants are just inside the waveguide aperture, use a sharp point wooden stick or break wooden portion of cotton swab to point, dip in denatured alcohol and use to clean in aperture.
5. Use compressed air to go over the flange and inside waveguide one last time.
6. Make final inspection of flange and aperture ensuring that no fibers, oil, or other particles left behind.

*\*Never use metallic tools to clean waveguide flange or aperture.*

### Waveguide Interface Tips:



-Never force waveguide mating parts together. Should slide into guiding pins easily. Do not force engagement.
-When tightening screws on waveguide each screw should be done so in small increments. Do not tighten one screw completely before moving on to the next. Follow a clockwise, counter clockwise or star formation, similar to tightening the bolts on a tire.
-On final tightening of screw, tighten fully, back off slightly and then re-tighten. This technique helps to minimize interface distortion.
-For proper mating of OML modules follow these tips: <ol style="list-style-type: none"> <li>1. Ensure units are set to the same height. Once matched, tightened the screws. Adjust the feet if needed by lightly turning to ensure each foot firmly flat on surface.</li> <li>2. To check that units are mated properly place paper underneath the feet. If properly mated the units should separate and come together smoothly at interface.</li> </ol>
-Utilize alignment pins, if present above and below the aperture, as this allows for better mechanical interface alignment. Hence providing better electrical performance.

*\*Note: Example of torque for tightening screws is 15 inch ounce for 1 port Cal.*

### Rules and Guidelines:

\*Never place finger over the waveguide aperture or interface.

\*If excess wear and tear on waveguide flange or marring on edges of aperture it is recommend to order a new part.