Providing a safer and easier-to-use laser solution, industry-leading Polymicro Technologies ™ MediSpec ™ Hollow Silica Waveguide With Aiming Beam Technology integrates delivery of power and beam alignment in a single lightweight fiber.

### Features and Benefits

- **Dual transmission of laser-power delivery and visible aiming beam in a single optical fiber**
- **Reduces cable bulk over typical two-fiber solutions.**
- **Decreases chance for laser burns due to lack of precision.**
- **Hollow Silica Waveguide (HSW) optimized for mid-infrared (IR) wavelengths**
- **Results in lighter, improved ergonomics for applications using carbon (CO₂) and Er:YAG lasers.**
- **500, 750 and 1000µm inner diameters (ID)**
- **Allows for a wide range of laser-power solutions.**
- **Tefzel® biocompatible jacket material**
- **Withstands ethylene oxide (EtO) sterilization for invasive medical procedures.**
- **Terminations upon request, using SMA, ST and FC connectors**
- **Provides flexibility with multiple connector interface options.**

### Specifications

#### Reference Information

- **Packaging:** Spool
- **Designed In:** Millimeters

#### Physical

- **Material — Tubing:** Synthetic Fused Silica
- **Material — Coating:** Tefzel® Biocompatible Jacket
- **Proof Tested @ Minimum 100kpsi:** 100% for Strength

#### Performance

- **Straight Loss (dB/m max.) @ 10.6µm CO₂ Hollow Waveguide with Tefzel Jacket**
  - JTHWCH5006801040 500µm ±25 650µm ±20 1040µm ±30 0.8 1.5
  - JTHWCH7509801300 750µm ±30 950µm ±25 1300µm ±50 0.5 1
  - JTHWCH100013301550 1000µm ±50 1300µm ±25 1550µm ±60 0.5 1

- **Bend Loss** (dB max.) @ 10.6µm CO₂ Hollow Waveguide with Tefzel Jacket

### Applications

- **Medical/Lasers**
- **Surgery**
- **Therapeutic**

### Ordering Information

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Component</th>
<th>Inner Diameter (µm)</th>
<th>Glass Outer Diameter (µm)</th>
<th>Buffer Outer Diameter (µm)</th>
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<td>106906</td>
<td>Polymicro Technologies ™ MediSpec ™ Hollow Silica Waveguide With Aiming Beam Technology</td>
<td>500, 750, 1000</td>
<td>680, 980, 1330</td>
<td>1040, 1300, 1550</td>
</tr>
</tbody>
</table>

Contact Molex

Customizable Hollow Silica Waveguide for CO₂ and Er:YAG Lasers

Not applicable

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* Tefzel is a trademark of E. I. Du Pont de Nemours and Company

** Bend loss in 360° 40cm diameter loop

**NOTE:** The end manufacturer is responsible for bio-compatibility and sterilization testing and validation studies.

www.molex.com/link/hswaimingbeam.html

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