Mini Expanded Beam Fibre Optic Connectors
Miniature rugged fibre optic connectors 2 and 4 channel

Tech Optics offers a range of rugged military fibre optic expanded beam connectors suitable for deployable and fixed communication systems.

The mini-series are compatible with the TE Pro-Beam Mini and Telecast MX connector ranges.

Solutions are available in 2 and 4 channel variants.

Tech Optics can supply components, UK manufactured cable assemblies, termination training, termination tooling / kits, test, inspection and maintenance equipment.

Features and Benefits

- Small size and weight
- Easy to clean / maintain
- Up to 2 and 4 channel connectors
- Single and Multimode Variants
- Hermaphroditic mating
- Low loss
- Environmentally sealed (IP68)

Applications

- Broadcast
- Mobile tactical shelters
- Electronic battlefield networks
- Mobile emergency telecommunications stations
- Deployable outdoor, harsh environment
- Mining
- Oil and gas / offshore applications

Typical Environmental Performance Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement Requirements</th>
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<tbody>
<tr>
<td>Insertion Loss</td>
<td>Singlemode (1310 / 1550nm) 0.75-1.5dB Fibre and polish dependent Return loss &gt; 34dB</td>
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<tr>
<td></td>
<td>Multimode (850 / 1300nm) 0.75-1.0dB fibre and polish dependent</td>
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<tr>
<td>Durability</td>
<td>3,000 matings minimum</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-45°C to +85°C (cable dependent)</td>
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<tr>
<td>Water immersion</td>
<td>5m</td>
</tr>
<tr>
<td>Drop Resistance</td>
<td>500 drops, 1.2m</td>
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<tr>
<td>Vibration</td>
<td>10-500Gz, 0.75mm amplitude, 10g</td>
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<tr>
<td>Corrosion resistance</td>
<td>336 hours salt spray</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP68 (with dust cap or mated pair)</td>
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</tbody>
</table>
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**Connector Plug**

* Boot options

* Boots are available for cable diameters of 3.6-4.5mm, 4.6-5.5mm and 5.6-6.5mm.

**Square Flange Receptacle**

**Jam Nut Receptacle**

For further information and to discuss your application please contact:

**Tech Optics Ltd.**
6 Tannery Road  
Tonbridge  
Kent  
TN9 1RF  
UNITED KINGDOM

T: +44(0)1732 770 466  
E: sales@techoptics.com

ISO9001:2015  
for the distribution of fibre optic products and the manufacture of fibre optic assemblies.