Passive Optical Components
Premium Connectivity Solutions

Ensure designs, develops, and manufactures innovative and customized components—including a wide range of fiber optic precision pieces and solutions for advanced FTTx applications—to meet the ever-increasing demands on passive optical networks.

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Patch cords and pigtails

Main features:
- Low insertion loss
- Multiple connector types available
- Multiple cable coating (PVC, OFNR, LSZH)

Main applications:
- Long haul, Metro, and Access system
- Fiber CATV
- Fiber data network
- Terminator for active optical modules

Product information:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber type</td>
<td>um</td>
<td>Multimode</td>
</tr>
<tr>
<td>Operating wavelength</td>
<td>nm</td>
<td>850/1300</td>
</tr>
<tr>
<td>insertion loss</td>
<td>dB</td>
<td>≤0.2</td>
</tr>
<tr>
<td>Return loss: UPC</td>
<td>dB</td>
<td>/</td>
</tr>
<tr>
<td>Return loss: APC</td>
<td>dB</td>
<td>≥50</td>
</tr>
<tr>
<td>Durability (500 times)</td>
<td>dB</td>
<td>≤0.2</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>°C</td>
<td>-20 - +75</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>°C</td>
<td>-20 - +85</td>
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</tbody>
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Adapters

Main features:
- Low insertion loss
- IEC compliant
- High-precision phosphor bronze or zirconia sleeve
- High reliability and stability

Main applications:
- WAN/LAN and access network
- CATV fiber optics links
- System interconnection
- Test equipment

Product information:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Min</th>
<th>Type</th>
<th>Max</th>
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<tbody>
<tr>
<td>Type</td>
<td></td>
<td></td>
<td>FC, SC, ST, LC, MU, MPO adapter</td>
<td></td>
</tr>
<tr>
<td>Insertion loss: SMF</td>
<td>dB</td>
<td></td>
<td></td>
<td>0.2</td>
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<tr>
<td>Insertion loss: MMF</td>
<td>dB</td>
<td></td>
<td></td>
<td>0.3</td>
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<tr>
<td>Connection durability (500 matings)</td>
<td>dB</td>
<td></td>
<td></td>
<td>&lt; 0.1</td>
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<tr>
<td>Sleeve withdrawal force</td>
<td></td>
<td></td>
<td></td>
<td>2.0N - 5.9N(200gf - 600gf)</td>
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<tr>
<td>Operating temperature</td>
<td>°C</td>
<td>-20</td>
<td></td>
<td>+85</td>
</tr>
<tr>
<td>Storage temperature</td>
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<td>-40</td>
<td></td>
<td>+85</td>
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Attenautors

Main features:
- Male-female connection
- Stable performance
- Easy to install

Main applications:
- Optical fiber communication system
- Cable TV Network
- FTTx
- Optical fiber transmissions lines
- ODN

Product information:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Attenuation</td>
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<tr>
<td>Wavelength</td>
<td>nm</td>
<td>1310/1550</td>
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<tr>
<td>Return Loss</td>
<td>dB</td>
<td>≥50</td>
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<tr>
<td></td>
<td></td>
<td>3 - 15</td>
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Order information - FAV:

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<th>Type</th>
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<td>SM: 9/125</td>
<td>F: FC</td>
<td>01: 0.1dB</td>
<td>U: UPC</td>
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<tr>
<td>M5: 50/125</td>
<td>S: SC</td>
<td>02: 0.2dB</td>
<td>A: APC</td>
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<td>M6: 62.5/125</td>
<td>T: ST</td>
<td>1: 1dB</td>
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<td></td>
<td>L: LC</td>
<td>25: 25dB</td>
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</tr>
<tr>
<td></td>
<td>MMU</td>
<td>X: Specify</td>
<td></td>
</tr>
</tbody>
</table>
Connectors

Main features:
- Compliant with Telcordia GR-326-CORE, TIA/EIA and IEC
- Superior quality standard PC/UPC/APC polishing
- Environmentally stable
- Low insertion loss & back reflection

Isolators

Main applications:
- Optical fiber communication system
- Cable TV network
- FTTx
- Optical fiber transmissions lines
- ODN

Circulators

Main applications:
- Optical fiber communication system
- Cable TV network
- FTTx
- Optical fiber transmissions lines
- ODN
Premium FFTx Solutions

At Ensure, we love what we do and the industry in which we work. Alongside our parent company, HH Group plus our corporate telecom siblings, we’ve helped customers meet the future head-on since 2001. With a massive commitment to R&D, we manufacture the highest-quality optical network components in our own facilities plus provide premium connectivity solutions that consistently exceed customer expectations.

We’re well-known in the marketplace for best-in-class design and manufacture of PLC splitters. We control the entire production chain in our own facilities from beginning to end, starting with first-stage essential components all the way through to full turnkey OEM solutions for clients who desire ready-to-ship products in custom-designed, branded packaging.

Here’s how we do it:

1. **Communications start here**
   We invest substantial capital in specialized equipment to manufacture PLC wafers, chips, FA arrays and ceramic ferrules. We take great pride in the quality and precision of our components.

2. **All steps under control**
   Our team oversees every step of the way in our high-capacity production facilities, with manufacturing procedures adjusted to the exact specifications of our clients.

3. **Quality and finish assured**
   We base our processes on the strictest international quality standards, ensuring premium quality in every PLC splitter that rolls off the line.
Millions of passive components shipped worldwide

We’ve shipped millions of passive components to satisfied customers around the world since 2001. Some fast facts:

1400+ EMPLOYEES, INCLUDING 60+ ENGINEERS

24 COUNTRIES WITH HAPPY CLIENTS

55 PATENTS

100% CLIENT SATISFACTION WORLDWIDE

Give us a shout!

Malu Town, Jiading District, Jiangsu Province
Dingzhu, Nanning Province
Hong Xing Road, Minhang District, Shanghai
Odivelas (Lisbon), Portugal

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