Standard Fiber Patch Cables

MAKE HIGH-SPEED ETHERNET NETWORK EQUIPMENT CONNECTIONS

Designed for data center, enterprise, FTTx, LAN and WAN, CATV network, telecom network applications etc. requiring quick infrastructure deployment such as main, horizontal, and zone distribution areas.

Fiber optic patch cables are ideal for supporting high speed telecommunication network fiber applications. They are manufactured and tested in compliance with TIA 604 (FOCIS), IEC 61754 and YD/T industry standards. OM1, OM2, OM3, OM4, OM5 or OS2 fiber types are available to meet the demand of Gigabit Ethernet, 10 Gigabit Ethernet and high speed Fiber Channel. Every termination is through rigorous parameter test to ensure the highest network performance.

Features

• High quality zirconia ferrules.
• Good repeatability and interchangeability.
• LC, SC, ST, FC, LSH, MTRJ, MU connectors are available.
• Flame-retardant, rugged and durable jacket.
• Printing helps clarify and recognize different cables.
• OS2, OM4, OM3, OM2, OM1, OM5 are available.
• Factory terminated and tested for insertion loss, return loss and end face.

Standards Compliance

• RoHS, ISO 9001 Compliant
• TIA 604 (FOCIS)
• TIA/EIA 492AAAE
• IEC 61754
• IEC 60793-2-10
• IEC 61300-3-35
• YD/T1272.1-2003
## Technical Specification

<table>
<thead>
<tr>
<th>Physical Characteristics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connector Types End A</strong></td>
<td>LC/SC/ST/FC/LSH/MTRJ/MU</td>
</tr>
<tr>
<td><strong>Connector Types End B</strong></td>
<td>LC/SC/ST/FC/LSH/MTRJ/MU</td>
</tr>
<tr>
<td><strong>Polish Type</strong></td>
<td>SMF: UPC-UPC; UPC-APC; APC-UPC; APC-APC; MMF: UPC-UPC</td>
</tr>
<tr>
<td><strong>Connector Ferrule</strong></td>
<td>Zirconia Ceramic</td>
</tr>
<tr>
<td><strong>Cable Outside Diameter</strong></td>
<td>0.9mm/2.0mm/3.0mm</td>
</tr>
<tr>
<td><strong>Interchangeability</strong></td>
<td>≤0.2dB</td>
</tr>
<tr>
<td><strong>Vibration</strong></td>
<td>≤0.2dB</td>
</tr>
<tr>
<td><strong>Minimum Bend Radius</strong></td>
<td>SMF: 10mm/30mm; MMF: 7.5mm/15mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mechanical Characteristics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fiber Type</strong></td>
<td>OS2/OM5/OM4/OM3/OM2/OM1</td>
</tr>
<tr>
<td><strong>Fiber Count</strong></td>
<td>Simplex/Duplex</td>
</tr>
<tr>
<td><strong>Cable Jacket</strong></td>
<td>PVC (Riser/OFNR)/LSZH/Plenum (OFNP)</td>
</tr>
<tr>
<td><strong>Jacket Color</strong></td>
<td>OM1/OM2: Orange; OM3/OM4: Aqua; OM5: Lime Green; OS2: Yellow</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optical Characteristics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connector Insertion Loss</strong></td>
<td>SMF: LC/SC/ST/FC/MU/LSH≤0.3dB; MMF: LC/SC/ST/FC/MU≤0.3dB; LSH≤0.4dB</td>
</tr>
<tr>
<td><strong>Connector Return Loss</strong></td>
<td>SMF: UPC≥50dB; APC≥60dB; MMF: ≥30dB</td>
</tr>
<tr>
<td><strong>Attenuation at 1310nm</strong></td>
<td>0.36dB/km</td>
</tr>
<tr>
<td><strong>Attenuation at 1550nm</strong></td>
<td>0.22dB/km</td>
</tr>
<tr>
<td><strong>Attenuation at 850nm</strong></td>
<td>3.0dB/km</td>
</tr>
<tr>
<td><strong>Attenuation at 1300nm</strong></td>
<td>1.0dB/km</td>
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</table>

<table>
<thead>
<tr>
<th>Environmental Characteristics</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-20~70°C</td>
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<tr>
<td><strong>Storage Temperature</strong></td>
<td>-40~80°C</td>
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### Transmission Distance Comparison

<table>
<thead>
<tr>
<th>Data Rate</th>
<th>Interface Type</th>
<th>Fiber Mode</th>
<th>Wavelength</th>
<th>Maximum Distance</th>
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<tbody>
<tr>
<td><strong>1G</strong></td>
<td>1000BASE-LX</td>
<td>OM5</td>
<td>850nm</td>
<td>550m</td>
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<tr>
<td></td>
<td></td>
<td>OM4</td>
<td>1300nm</td>
<td>550m</td>
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<tr>
<td></td>
<td></td>
<td>OM3</td>
<td>1300nm</td>
<td>550m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OM2</td>
<td>1300nm</td>
<td>550m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OM1</td>
<td>1300nm</td>
<td>550m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMF</td>
<td>1310nm</td>
<td>10km</td>
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<td>1000BASE-SX</td>
<td>OM4</td>
<td>850nm</td>
<td>550m</td>
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<td></td>
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<td>OM3</td>
<td>850nm</td>
<td>550m</td>
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<td></td>
<td></td>
<td>OM2</td>
<td>850nm</td>
<td>550m</td>
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<tr>
<td></td>
<td></td>
<td>OM1</td>
<td>850nm</td>
<td>275m</td>
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<td><strong>10G</strong></td>
<td>10GBASE-SR</td>
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<td>850nm</td>
<td>400m</td>
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<td>OM3</td>
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<td>OM2</td>
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<td>82m</td>
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<td>OM1</td>
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<td>10GBASE-LRM</td>
<td>OM5</td>
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<td>OM2</td>
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<td>OM1</td>
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<td>10GBASE-LR</td>
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<td>10GBASE-ER</td>
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<td>OM4</td>
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<td>OM3</td>
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<td>OM3</td>
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<td>40G-SWDM4</td>
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<td>40GBASE-LR4</td>
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<td><strong>100G</strong></td>
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<tr>
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<td>OM4</td>
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<td>OM3</td>
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<td>100GBASE-SR10</td>
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<tr>
<td></td>
<td>100GBASE-ER4</td>
<td>SMF</td>
<td>1310nm</td>
<td>40km</td>
</tr>
</tbody>
</table>
Optic Fiber Connectors Guidance

1. LC

Long Form
- Lucent Connector/Little Connector/Local Connector

Typical Applications
- High-density connections, SFP and SFP+ transceivers, XFP transceivers

2. SC

Long Form
- Subscriber Connector/Square Connector/Standard Connector

Typical Applications
- Datacom and telecom; GPON; EPON; GBIC

3. FC

Long Form
- Ferrule Connector or Fiber Channel

Typical Applications
- Datacom, telecom, measurement equipment, single mode lasers

4. ST

Long Form
- Straight Tip

Typical Applications
- Datacom

5. LSH

Typical Applications
- Telecom, DWDM systems

6. MU

Long Form
- Miniature Unit

Typical Applications
- LANs and telecommunication networks
Test Center

Comprehensive performance testing system ensures more secure operation and keeps more stable and reliable data connection. The IL & RL of fiber optic patch cables are tested to ensure stable network performance. Clean optical connectors are paramount in providing a reliable, high-performance fiber optic infrastructure.

Professional Test Equipment

Test Assured Program

Insertion Loss Testing

Return Loss Testing

End-Face Inspection
### Hot Products

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#40191</td>
<td>1m (3ft) LC UPC to LC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm</td>
</tr>
<tr>
<td>#40214</td>
<td>1m (3ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm</td>
</tr>
<tr>
<td>#42926</td>
<td>1m (3ft) LC UPC to LC UPC Duplex OS2 Single Mode LSZH 2.0mm</td>
</tr>
<tr>
<td>#40446</td>
<td>1m (3ft) LC UPC to LC UPC Simplex OS2 Single Mode PVC (OFNR) 2.0mm</td>
</tr>
<tr>
<td>#42676</td>
<td>1m (3ft) SC APC to SC APC Simplex OS2 Single Mode LSZH 2.0mm</td>
</tr>
<tr>
<td>#40180</td>
<td>1m (3ft) LC UPC to LC UPC Duplex OM4 Multimode PVC (OFNR) 2.0mm</td>
</tr>
<tr>
<td>#41730</td>
<td>1m (3ft) LC UPC to LC UPC Duplex OM3 Multimode PVC (OFNR) 2.0mm</td>
</tr>
</tbody>
</table>
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