Optical Jumper Cable

JUMP Series

Product Description
Oplink’s Optical Jumper Cable is designed for interconnection for all optical systems or components. Oplink offer a wide range of industrial standard jumper cables with various fiber and fiber jacket types, connectors, and lengths. With our highly integrated design and manufacturing capability, Oplink can also provide customized products to help our customer for better opportunities. Our jumper cable complies with industry green initiative such as Rohs.

Features
- Various Option of fiber and connector types and lengths
- Environmental Green Plan Compliance
- High Reliability and Stability
- Premium Optical Connector
- 100% Ferrule Turning to minimize Insertion Loss
- 100% DORC Test

Applications
- Optical System Access Network
- System interconnection

Product Specifications

<table>
<thead>
<tr>
<th>Parameters</th>
<th>S Grade (Low Loss)</th>
<th>P Grade (Standard)</th>
<th>Unit.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Wavelength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-Mode</td>
<td></td>
<td>1260 ~ 1620</td>
<td>nm</td>
</tr>
<tr>
<td>Multi-Mode</td>
<td></td>
<td>850 &amp; 1310</td>
<td>nm</td>
</tr>
<tr>
<td>Insertion Loss (PC/UPC Type)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-Mode</td>
<td>0.15</td>
<td>0.25</td>
<td>dB</td>
</tr>
<tr>
<td>Multi-Mode*</td>
<td>0.30</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Insertion Loss (APC Type)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-Mode</td>
<td>0.30</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Return Loss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-Mode PC Type</td>
<td>45</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Single-Mode UPC Type</td>
<td>50</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Single-Mode APC Type</td>
<td>60</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Multi-Mode</td>
<td>35</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Connection Durability</td>
<td></td>
<td>500</td>
<td>mating</td>
</tr>
<tr>
<td>Connector Repeatability</td>
<td>0.2</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td></td>
<td>-20 ~ 70</td>
<td>°C</td>
</tr>
<tr>
<td>Fiber Type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Mode Fiber</td>
<td>SMF-28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi Mode Fiber</td>
<td>50/125 µm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>62.5/125 µm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
1) Tested at 1310nm and 1550nm for single-mode jumper, 850nm and 1310nm for multi-mode jumper.
2) *: For jumper length less than 5 meter. Additional 0.03dB for every 10 meters within 850nm window, and 0.01dB for 1310nm window.
### Mechanical Drawing

![Mechanical Drawing](image)

### Fiber Tolerance

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Unit</th>
<th>Remark</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>L</td>
<td>m</td>
<td>For illustration see drawing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length Deviation*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L ≤ 1m</td>
<td></td>
<td>mm</td>
<td>@ Jumper w/ length up to 1m</td>
<td>-20</td>
<td>+20</td>
</tr>
<tr>
<td>1m &lt; L ≤ 3m</td>
<td></td>
<td>mm</td>
<td>@ Jumper w/ length up to 1-3m</td>
<td>-50</td>
<td>+50</td>
</tr>
<tr>
<td>3m &lt; L ≤ 10m</td>
<td></td>
<td>mm</td>
<td>@ Jumper w/ length up to 3-10m</td>
<td>-100</td>
<td>+100</td>
</tr>
<tr>
<td>L &gt; 10m</td>
<td></td>
<td>%</td>
<td>@ Jumper w/ length more than 10m</td>
<td>-2%</td>
<td>+2%</td>
</tr>
</tbody>
</table>

### Ordering Information

**JUMP**

- **Package Type**
  - 1 = Simplex
  - 2 = Duplex

- **Jacket Type**
  - 1 = 900µm (SM/MM)
  - 2 = 1.8mm (SM, Yellow)
  - 3 = 2.0mm (SM, Yellow)
  - 4 = 2.4mm (SM, Yellow)
  - 5 = 3.0mm (SM, Yellow)
  - 6 = 2.0mm (MM, Orange)
  - 7 = 3.0mm (MM, Orange)
  - 8 = 2.0mm (OM3, Aqua)
  - 9 = 3.0mm (OM3, Aqua)
  - A = 2.0mm (OM4, Purple)
  - B = 3.0mm (OM4, Purple)

- **Jumper Length**
  - 0005 = 0.5m
  - 0010 = 1.0m
  - 0020 = 2.0m
  - 0100 = 10m
  - 0990 = 99m
  - 1000 = 100m

- **IL Grade**
  - 0 = P Grade
  - 1 = S Grade

- **Ferrule Type**
  - 0 = PC
  - 1 = Cone
  - 2 = Step

- **Connector (Side A)**
  - 1 = None
  - 2 = FC/PC
  - 3 = FC/UPC
  - 4 = FC/APC
  - 5 = SC/PC
  - 6 = SC/UPC
  - 7 = SC/APC
  - 8 = ST
  - 9 = LC/PC
  - A = MU
  - B = LC/PC
  - C = E2000/APC
  - E = LC/UPC
  - F = E2000/PC

- **Connector (Side B)**
  - 1 = FC/PC
  - 2 = FC/UPC
  - 3 = FC/APC
  - 4 = SC/PC
  - 5 = SC/UPC
  - 6 = SC/APC
  - 7 = ST
  - 8 = LC/PC
  - A = MU
  - B = LC/PC
  - C = E2000/APC
  - E = LC/UPC
  - F = E2000/PC

**Fiber Type**

- S = Single mode
- M = Multi mode (50/125)
- N = Multi mode (62.5/125)
- 3 = OM3 (50/125, 10G)
- 4 = OM4 (50/125, 100G)

**Note:**

1. **IL Grade:**
   - S Grade is only for Single Mode PC/UPC Type.
2. **Ferrule Type:**
   - PC/UPC Type is only PC Ferrule for optional.
   - APC Type is Cone or Step Ferrule for optional, but LC/APC is only Cone Ferrule for optional.