Fully customizable Plastic Optical Fiber (POF) assemblies and harnesses are a rugged, cost-effective solution offering maximum flexibility for optical cabling in many industrial, medical, transportation, renewable energy, smart grid and consumer applications

Molex offers fully customizable, cost-competitive Plastic Optical Fiber (POF) cable-assembly and harness solutions, providing maximum flexibility to customers specifying optical cabling in industrial, medical, renewable energy, power and data transmission, transportation and consumer applications including controls, drives, factory automation, high-speed trains, sensors and imaging. Plastic optical fiber (POF) cables, made from light-conducting plastics, are used for optical cabling networks over short distances, while glass fiber-optic cables are used for long distances.

Customers are able to specify assemblies and harnesses in terms of connector types, jacket material and color, temperature range, UL certification, cable lengths and tolerances. Molex SMI connectors, plus a wide range of connectors from different manufacturers, are available to answer specific application requirements at a competitive cost.

Purchasing fully customized cable solutions from Molex can allow customers to simplify their supply-chain through vendor reduction and remove third-party margins/ costs. For additional information visit: www.molex.com/link/pof.html

**Features and Benefits**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL cable certification</td>
<td>Meets globally recognized safety standards</td>
</tr>
<tr>
<td>Industrial and extended temperature ranges</td>
<td>Withstands harsh environments</td>
</tr>
<tr>
<td>Choice of polymer and metal connectors</td>
<td>Offers robust Insertion Loss (IL) performance, less than 2.8dB per connector, through cost-effective components selection</td>
</tr>
<tr>
<td>Custom cable lengths and length tolerances</td>
<td>Provides full design flexibility while meeting precise application requirements</td>
</tr>
<tr>
<td>Bare-fiber assembly capabilities</td>
<td>Ideal solution for sensor applications</td>
</tr>
</tbody>
</table>

**Applications**

**Alternative Energy Solution:**
- Wind Turbines
  - Control systems
  - Power electronics/ IGBT/ IGCT
  - Sensors (structural health monitoring)
  - Inverters/ drives
  - Pitch control

**Industrial Automation**
- Factory automation
- Ethernet based applications
- Robotics
- Fieldbuses
- Sensors

**Medical**
- Imaging
- Galvanic Isolation
- Optical sensors

**Transportation**
- Traction, high-speed trains
- Rolling stock
- Rail infrastructure

**Features and Benefits**

- Fully customizable Plastic Optical Fiber (POF) assemblies and harnesses
- UL cable certification
- Meets globally recognized safety standards
- Industrial and extended temperature ranges from -55 up to +105°C
- Withstands harsh environments
- Choice of polymer and metal connectors from a wide range of manufacturers
- Offers robust Insertion Loss (IL) performance, less than 2.8dB per connector, through cost-effective components selection
- Custom cable lengths and length tolerances
- Provides full design flexibility while meeting precise application requirements
- Bare-fiber assembly capabilities
- Ideal solution for sensor applications
**Additional Product Features**

- ST POF connector
- FSMA POF connector
- Toslink F07 duplex POF connectors
- Toslink F05 simplex connectors
- Toslink F05 simplex connector, crimpless
- Avago crimpless simplex & duplex solution, with or without latching
- Avago duplex/ crimp ring with or without latching
- Avago simplex/crimp ring with latching
- Avago simplex connector/crimp ring

**Specifications**

**REFERENCE INFORMATION**
- UL Approval: Yes (cable jacket dependent)
- IL parameters: Less than 2.8 dB/connector
- RoHS: Yes
- Halogen Free: On request

**PHYSICAL**
- Connector types include: SMI, Avago VL, SMA, ST; FC, Toslink F05, F07, additional types on request
- Jacket type: PE, CPE, PVC, PA
- Operating Temperatures: -55 to +85°C or -55 to +105°C

**Ordering Information**

CONTACT MOLEX.

www.molex.com//link/pof.html