SFP/SFP+ Modules and Cabling

Single-Mode or Multi-Mode Compatibility

1 Gbps Using SFP or 10G Speeds Using SFP+

BiDi Models for Reuse of Existing Infrastructure
Overview

Ubiquiti Networks offers a variety of U Fiber™ modules to suit your fiber connectivity applications.

Two multi-mode models are available:
- UF-MM-1G: SFP, 1 Gbps
- UF-MM-10G: SFP+, 10 Gbps

Three single-mode models are available:
- UF-SM-1G-S: SFP, 1 Gbps, BiDi
- UF-SM-10G: SFP+, 10 Gbps
- UF-SM-10G-S: SFP+, 10 Gbps, BiDi

Indoor Runs

For convenient multi-mode connections that extend beyond the 100-meter limitation of Ethernet cabling, use the UF-MM-10G for distances of up to 300 m and speeds of up to 10 Gbps, or use the UF-MM-1G for distances of up to 550 m and speeds of up to 1 Gbps.

Outdoor Use

For long-distance single-mode runs, use the UF-SM-10G for distances of up to 10 km at 10 Gbps, or use the UF-SM-1G for distances of up to 3 km at 1 Gbps. To protect DC power and fiber, deploy EdgePoint™ with EdgePower™.

Deploy a BiDi (BiDirectional) model, UF-SM-1G-S or UF-SM-10G-S, to maximize re-use of existing infrastructure. You must deploy a BiDi model as a paired set of modules because the pair uses two different wavelengths, upstream and downstream, on a single fiber.

Fiber Routing and Switching

Ubiquiti offers EdgeRouter™ models with SFP port(s) and multiple fiber switch options to suit your specific network infrastructure:

<table>
<thead>
<tr>
<th></th>
<th>US-16-XG*</th>
<th>ES-16-XG</th>
<th>ES-12F</th>
</tr>
</thead>
<tbody>
<tr>
<td>10G</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>1G</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>UniFi®</td>
<td>✓</td>
<td></td>
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<tr>
<td>Fiber to the X</td>
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</table>


Application Examples

UniFi Site

Tower Installation

Fiber to the X Deployment
### FiberModule™

#### Model Comparison

<table>
<thead>
<tr>
<th>Supported Media</th>
<th>UF-MM-1G</th>
<th>UF-MM-10G</th>
<th>UF-SM-1G-S</th>
<th>UF-SM-10G</th>
<th>UF-SM-10G-S</th>
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<tbody>
<tr>
<td>BiDi</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>TX Wavelength</td>
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<td>850 nm</td>
<td>1310 nm</td>
<td>1270 nm</td>
<td>1330 nm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Blue Yellow</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1310 nm</td>
<td>1550 nm</td>
<td></td>
</tr>
<tr>
<td>RX Wavelength</td>
<td>850 nm</td>
<td>850 nm</td>
<td>1310 nm</td>
<td>1330 nm</td>
<td>1270 nm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1550 nm</td>
<td>1310 nm</td>
<td></td>
</tr>
<tr>
<td>Data Rate</td>
<td>1.25 Gbps SFP</td>
<td>10 Gbps SFP+</td>
<td>1.25 Gbps SFP</td>
<td>10 Gbps SFP+</td>
<td>10 Gbps SFP+</td>
</tr>
<tr>
<td>Cable Distance</td>
<td>550 m</td>
<td>300 m</td>
<td>3 km</td>
<td>10 km</td>
<td>10 km</td>
</tr>
<tr>
<td>Pack Options</td>
<td>2-Pack, 20-Pack</td>
<td>2-Pack, 20-Pack</td>
<td>1-Pair, 10-Pairs</td>
<td>2-Pack, 20-Pack</td>
<td>1-Pair, 10-Pairs</td>
</tr>
</tbody>
</table>

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### FiberCable™

**Models: FC-SM-100, FC-SM-200, FC-SM-300**

**Single-Mode LC Fiber Cable**

Build your outdoor fiber network using our steel-armored FiberCable. Lightweight and flexible, FiberCable is ideal for tower deployments of our outdoor routing and switching products, such as EdgePoint. Available in 100, 200, and 300 ft lengths.

- Steel-Armored for Enhanced Pinch Protection
- Outdoor-Rated Jacket with Ripcord
- Integrated Weatherproof Tape
- Kevlar Yarn for Added Tensile Strength (800 N min.)
- Outer Diameter of Cable: 5.8 ± 0.2 mm
- Six-Strand Single-Mode (G.657.A2)
- Outer Diameter of Fiber Strand: 0.25 mm Nominal
- Insertion Loss
  - 1310 nm: 0.40 dB/km
  - 1550 nm: 0.30 dB/km

Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: [www.ubnt.com/support/warranty](http://www.ubnt.com/support/warranty)

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