DATASHEET



UFiber

SFP/SFP+ Modules and Cabling

Single-Mode, Multi-Mode, or Copper Compatibility

1 Gbps Using SFP or 10G Speeds Using SFP+

BiDi Models for Reuse of Existing Infrastructure

UBIQUITI®
NETWORKS

FiberModule™

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

One copper model is available:

- UF-RJ45-1G: 10/100/1000 Mbps

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.

The UF-RJ45-1G allows you to connect a copper Ethernet cable to a SFP or SFP+ slot for distances of up to 100 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.

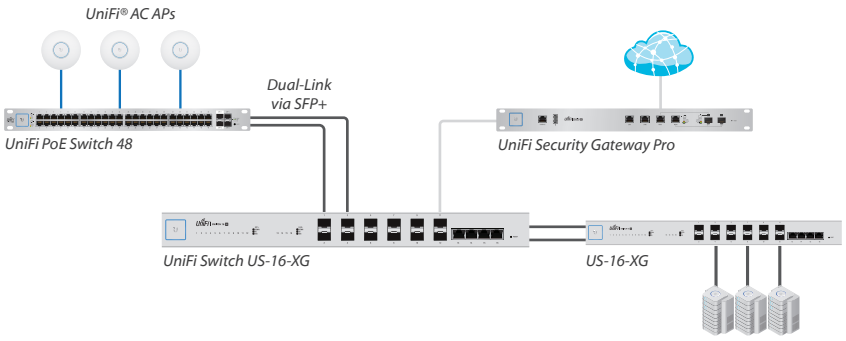
Fiber Routing and Switching

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

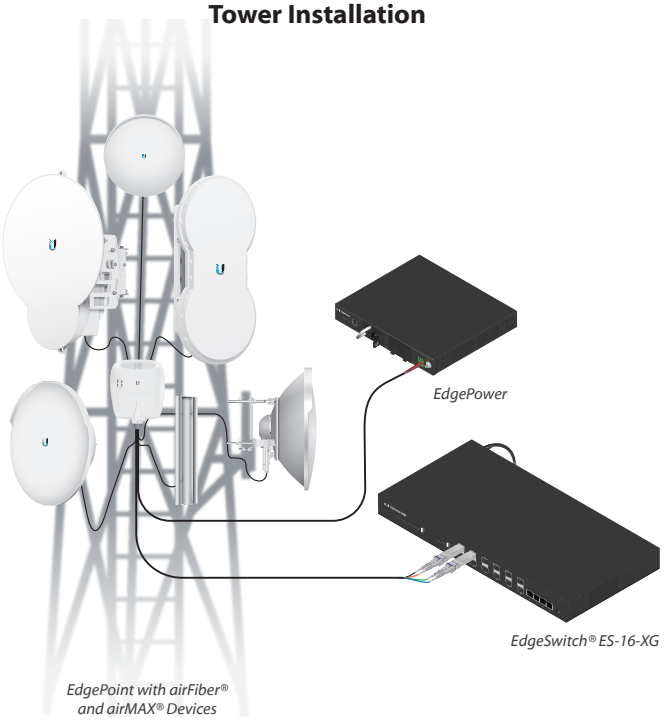
	US-16-XG	ES-16-XG	ES-12F
10G	✓	✓	
1G	✓	✓	✓
UniFi®	✓		
Fiber to the X		✓	✓

Application Examples

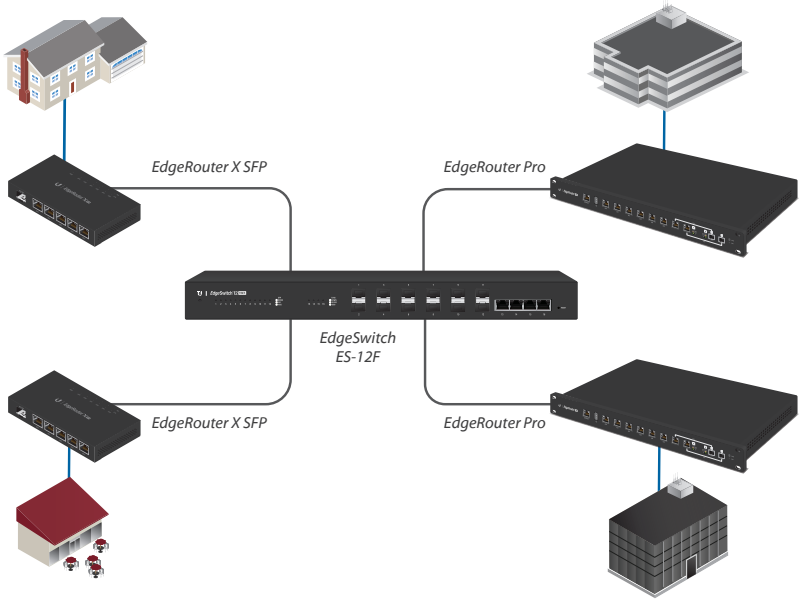
UniFi Site



Tower Installation



Fiber to the X Deployment



FiberModule™

Model Comparison



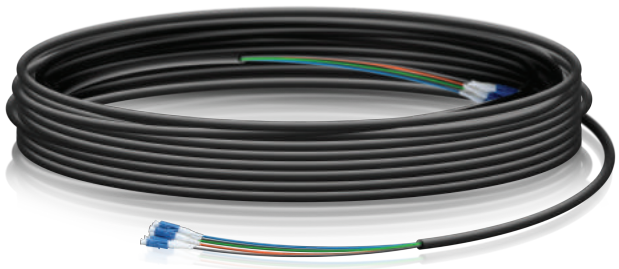
	UF-MM-1G	UF-MM-10G	UF-SM-1G-S	UF-SM-10G	UF-SM-10G-S	UF-RJ45-1G
Supported Media	Multi-Mode Fiber	Multi-Mode Fiber	Single-Mode Fiber	Single-Mode Fiber	Single-Mode Fiber	Copper
Connector Type	(2) LC	(2) LC	(1) LC	(2) LC	(1) LC	RJ45
BiDi			✓		✓	
TX Wavelength	850 nm	850 nm	Blue 1310 nm / Yellow 1550 nm	1310 nm	Blue 1270 nm / Red 1330 nm	
RX Wavelength	850 nm	850 nm	Blue 1550 nm / Yellow 1310 nm	1310 nm	Blue 1330 nm / Red 1270 nm	
Data Rate	1.25 Gbps SFP	10 Gbps SFP+	1.25 Gbps SFP	10 Gbps SFP+	10 Gbps SFP+	10/100/1000 Mbps
Cable Distance	550 m	300 m	3 km	10 km	10 km	100 m
Operating Temperature	0 to 70° C (32 to 158° F)	0 to 70° C (32 to 158° F)	0 to 70° C (32 to 158° F)	0 to 70° C (32 to 158° F)	0 to 70° C (32 to 158° F)	0 to 70° C (32 to 158° F)
Pack Options	2-Pack, 20-Pack	2-Pack, 20-Pack	1-Pair, 10-Pairs	2-Pack, 20-Pack	1-Pair, 10-Pairs	20-Pack

FiberCable™

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

Single-Mode LC Fiber Cable

Build your outdoor fiber network using our 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.



- Outdoor-Rated Jacket with Ripcord
- Integrated Weatherproof Tape
- Kevlar Yarn for Added Tensile Strength
- Outer Diameter of Cable: 6.0 ± 0.2 mm
- Six-Strand Single-Mode (G.657.A2)
- Outer Diameter of Fiber Strand: 0.25 mm Nominal
- Insertion Loss
  - 1310 nm: ≤0.5 dB/km
  - 1550 nm: ≤0.5 dB/km

FiberCable™

Models: UDC-1, UDC-2, UDC-3

10G SFP+ Direct Attach Passive Copper Cables

Available in lengths of 1, 2 and 3 meters, the 10G SFP+ direct attach passive copper cables support multi-gigabit data rates of up to 10.5 Gbps. The SFP+ direct attach passive copper cables are ideal for indoor telecommunications and data networks using our routing and switching products, such as the EdgeRouter, EdgeSwitch, and UniFi Switch.

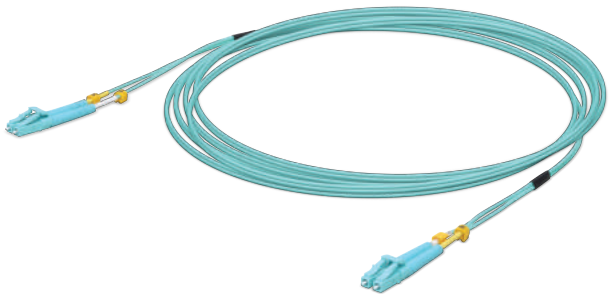
- Hot-swappable SFP+
- Cable Diameter: 30AWG
- Case Operating Temperature: 0 to 70° C (32 to 158° F)



Models: UOC-0.5, UOC-1, UOC-2, UOC-3, UOC-5

10G Multi-Mode ODN Cables

Scale your fiber network using our flexible and lightweight fiber patch cables. The 10G multi-mode fiber patch cables are ideal for indoor telecommunications and data networks using our routing and switching products, such as the EdgeRouter, EdgeSwitch, and UniFi Switch. Available in 0.5, 1, 2, 3, and 5 meter lengths.



Specifications

UFiber ODN Cables	
Connector	LC-LC
Fiber Mode	50 / 125 µm
Fiber Type	Duplex
Cable Length	
UOC-0.5	0.5 m
UOC-1	1 m
UOC-2	2 m
UOC-3	3 m
UOC-5	5 m
Cable Jacket	PVC
Cable Standard	OM3
Insertion Loss	≤ 0.3 dB
Polish	UPC to UPC
Jacket OD	2.0 mm
Wavelength	850 / 1310 nm
Jacket Color	Aqua
Repeatability	≤ 0.1 dB
Durability	≤ 0.2 dB (1000 Times Mating)
Return Loss	≤ 50 dB
Operating Temperature	-40 to 75° C (-40 to 167° F)

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