# **D**ATASHEET





## SFP/SFP+ Modules and Cabling

Models: UF-MM-1G, UF-MM-10G, UF-SM-1G-S, UF-SM-10G, UF-SM-10G-S, FiberCable

Single-Mode or Multi-Mode Compatibility

1 Gbps Using SFP or 10G Speeds Using SFP+

BiDi Models for Reuse of Existing Infrastructure



# **Fiber**Module<sup>™</sup> **Overview**

Ubiquiti Networks offers a variety of U Fiber<sup>™</sup> 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

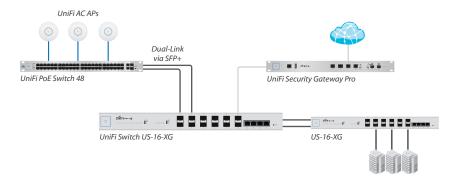
Ubiquiti offers EdgeRouter<sup>™</sup> models with SFP port(s) and multiple fiber switch options to suit your specific network infrastucture:

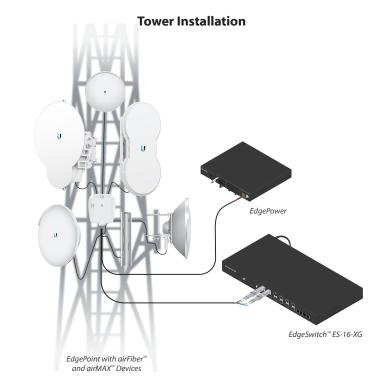
	US-16-XG*	ES-16-XG	ES-12F
10G	✓	✓	
1G	✓	✓	✓
UniFi®	✓		
Fiber to the X		√	<b>√</b>

<sup>\*</sup> US-16-XG ships in volume in Dec 2016.

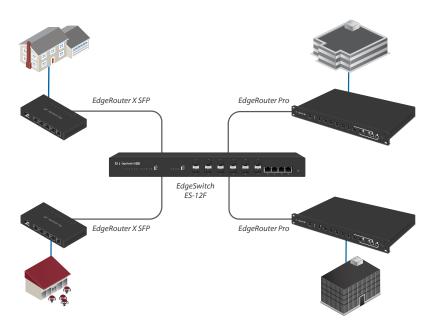
## **Application Examples**

#### **UniFi Site**





### **Fiber to the X Deployment**



## **Model Comparison**











	UF-MM-1G	UF-MM-10G	UF-MM-10G UF-SM-1G-S		UF-SM-10G	UF-SM-10G-S	
Supported Media	Multi-Mode Fiber	Multi-Mode Fiber Single-Mode Fiber		Single-Mode Fiber	Single-Mode Fiber		
Connector Type	(2) LC	(2) LC	) LC (1) LC		(2) LC	(1) LC	
BiDi						<b>✓</b>	
TX Wavelength	850 nm	850 nm	Blue	Yellow	1310 nm	Blue	Red
			1310 nm	1550 nm		1270 nm	1330 nm
RX Wavelength	850 nm	850 nm	Blue	Yellow	1310 nm	Blue	Red
			1550 nm	1310 nm		1330 nm	1270 nm
Data Rate	1.25 Gbps SFP	10 Gbps SFP+	1.25 Gbps SFP		10 Gbps SFP+	10 Gbps SFP+	
Cable Distance	550 m	300 m	3 km		10 km	10 km	
Pack Options	2-Pack, 20-Pack	2-Pack, 20-Pack	1-Pair, 10-Pairs		2-Pack, 20-Pack	1-Pair, 10-Pairs	

# **Fiber**Cable<sup>™</sup>

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:  $5.8 \pm 0.2$  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



