DATASHEET



Powerful Performance for Long-Range Links

Robust Design and Construction for Outdoor Use

Seamless Integration with airFiber AF-11FX Radio



Overview

Ubiquiti Networks introduces the airFiber® AF-11G35 antenna, designed for use in the licensed 11 GHz band. Break free of the crowded 5 GHz spectrum by pairing the airFiber AF-11G35 antenna with the airFiber AF-11FX radio (available separately), to create the endpoint of an 11 GHz high-performance, full-duplex, Point-to-Point bridge or network backhaul.

Powerful Performance

The airFiber AF-11G35 antenna delivers SISO or 2x2 MIMO, dual-polarity performance. On the right is one example of how the AF-11G35 antenna with the AF-11FX radio can be deployed as endpoints in a backhaul link to deliver bandwidth from a WISP network out to a neighborhood tower. From there, an airMAX® Sector antenna with a Rocket® radio delivers bandwidth to the WISP's customers.

Upgrade to Licensed, Full-Duplex 11 GHz

For existing Ubiquiti Networks® AF-5 and AF-5U installations, the AF-11G35 provides a quick, convenient upgrade path to the licensed 11 GHz band.

The airFiber AF-11G35 uses the same antenna mount as the airFiber AF-5 and AF-5U – by simply swapping out an AF-5 or AF-5U with the AF-11G35, you can quickly and easily upgrade an unlicensed, full-duplex 5 GHz link to a licensed, full-duplex 11 GHz link.

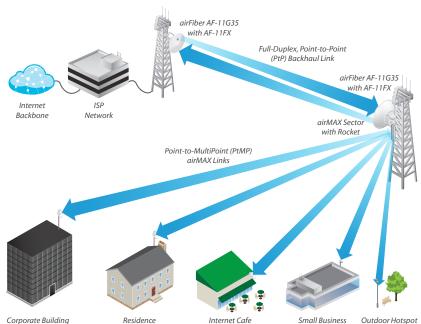
Carrier-Class Construction

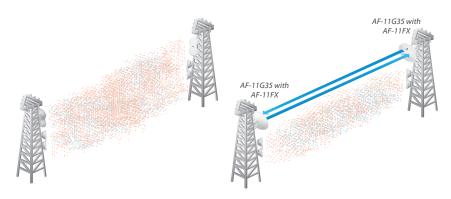
Incorporating a dish reflector design for excellent beam directivity, the airFiber AF-11G35 antenna features robust mechanical design using industrial-strength hardware for outdoor application use.

Plug and Play Integration

The AF-11G35 antenna has a built-in mount for the AF-11FX radio, so installation requires no special tools. Snap the airFiber AF-11FX radio securely into place and mount the antenna; you then have the optimal airFiber X antenna and radio combination for your 11 GHz PtP application.

Application Example





Unlicensed, Full-Duplex 5 GHz Links using AF-5/AF-5U

Licensed, Full-Duplex 11 GHz Link After Upgrading AF-5/AF-5U to AF-11G35 with AF-11FX



Mounting the AF-11FX on the AF-11G35

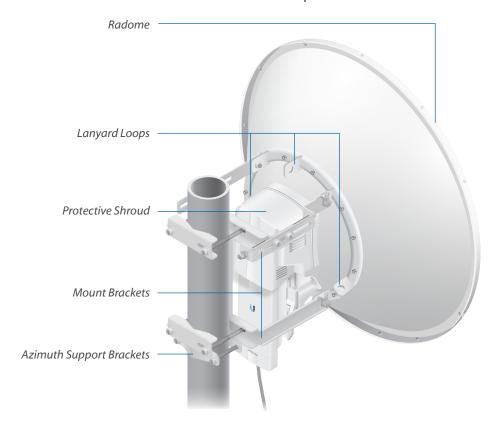
Hardware Overview

Innovative, Weatherproof Design

- Secure Pole-Mounting Maintains the position of the dish during harsh outdoor conditions.
- Protective Shroud Protects the cables and connectors from the elements.
- Integrated Radome Shields the radio from the environment.

Mount Designed for Safety, Easy Upgrade

- Lanyard Loops Assist in safely hoisting the antenna up a tower and into place.
- Azimuth Support Brackets Allow the antenna to be safely supported while the azimuth is adjusted.
- Shared AF-5/AF-5U Mount Design Facilitates upgrade of full-duplex links from unlicensed 5 GHz to licensed 11 GHz.



air Fiber X Antenna

The AF-11G35 antenna is specially designed for the AF-11FX radio, so that installation requires no special tools. The AF-11G35 comes preconfigured with V/H polarization, and can be configured to support \pm 45° slant polarization for improved noise immunity and Signal-to-Noise Ratio (SNR), dependent on regulatory region.

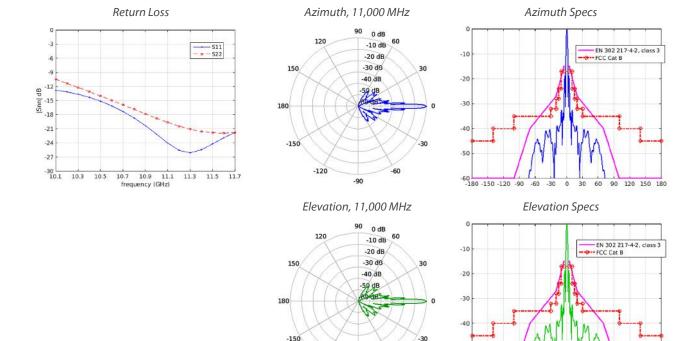


Model	Frequency	Gain	Radome
AF-11G35	10.3 - 11.7 GHz	35 dBi	Integrated

Specifications

AF-11G35 Antenna Characteristics		
Dimensions	ø 811 x 460 mm (ø 31.9 x 18.1")	
Weight	Mount Not Included: 7.14 kg (15.74 lb) Mount Included: 11.85 kg (26.12 lb)	
Frequency Range	10.3 - 11.7 GHz	
Gain	35 dBi	
HPOL Beamwidth	2.5°	
VPOL Beamwidth	2.5°	
Front-to-Back Ratio	60 dB	
Max. VSWR	2:1	
Wind Survivability	200 km/h (125 mph)	
Wind Loading	1538 N @ 200 km/h (346 lbf @125 mph)	
Polarization	Default: H/V After Rotating OMT: ±45°	
Cross-Pol Isolation	35 dB	
Mounting	Uses the AF-5/AF-5U Mounting System	
Pattern Regulatory	ETSI 302 217-4-2, Class 3 and FCC Cat B	

AF-11G35 Antenna Information





-120



-60 -180 -150 -120 -90