airFiber 60 HD

Multi-gigabit, 60 GHz bridge with SFP+ support and a 2 km link range.

The airFiber 60 HD (AF60 HD) is a 60 GHz radio designed to create superior mid-range, point-to-point (PtP) links up to 2 km. The AF60 HD delivers low-interference, low-latency throughput within the 60 GHz spectrum. Compact and highly durable, the AF60 HD also features integrated GPS and a Bluetooth management radio to simplify setup, configuration, and monitoring. This bridge is ideal for ISPs looking to maximize signal linking with cost-effective equipment.

Mechanical

Dimensions	Ø189 x 89 mm (Ø7.4 x 3.5")
Weight	Without mount: 1.8 kg (3.9 lb) With mount: 2.95 kg (6.5 lb)
Enclosure materials	Aluminum alloy, UV stabilized plastic
Mount material	Stainless steel (SUS304)
Mount	60G precision alignment pole mount (included)
Wind loading	64 N at 200 km/h (14.39 lbf at 125 mph)
Weatherproofing	IPX6

Hardware

Processor	Quad-Core ARM® Cortex® A72 at 1.6 GHz
Memory	2 GB DDR4
Networking interfaces	(1) GbE RJ45 port (1) 1/10G SFP+ port
Button	Factory reset
RF connections	Internal
Max. power consumption	29.31W
Power method	Passive PoE 4-pairs (1, 2+; 3, 6-) (4, 5+; 7, 8-) or 2-Pairs (4, 5+; 7, 8-)
Power supply	48VDC, 0.65A gigabit PoE adapter (included)
Supported voltage range	48VDC ± 10%
Operating temperature	-40 to 55° C (-40 to 131° F)
Operating humidity	5 to 95% noncondensing
Certifications	FCC, IC, CE, terragraph

LEDs

Power	Flashing white: bootup in progress White: not connected to UISP console Blue: connected to UISP console
Ethernet	Flashing blue: ethernet activity
GPS	Blue: receiving at least (4) GPS satellite signals
60G	Blue: active connection

System

Maximum throughput	60 GHz: 3.8 Gbps/6 Gbps (with channel bonding enabled)
Maximum range	2 km
Encryption	WPA2-PSK (AES)
Uplink/Downlink ratio	50/50

Software

OS	airFiber®
Modes	PtP only
Services	UISP, ping watchdog, web server, SSH server, NTP client, system log, device discovery
Utilities	Beamform info, discovery utility, ping, trace route, speed test
Network	Bridge mode
Wireless settings	GPS sync* *GPS is used to populate UI/UX elements.
Management interface	Bluetooth management for easy setup over UISP app WEB UI
Minimum software requirements	Any modern WEB browser/iOS or Android based smartphone

RF

Operating frequency*	57 to 66 GHz *Depends on regulatory region.
GPS	Yes
Channel bandwidth	2160 MHz/4320 MHz (with channel bonding enabled)
Operating channels	58320, 59400, 60480, 61560, 62640, 63720, 64800 MHz* *It depends on the channel bandwidth
Beamwidth	HPOL: NaN (the antenna is only vertically polarized) VPOL: 3° Elevation: 3°
Electrical downtilt	0°