Item no.: AF-5

AF-5 EU - airFiber 5 Point-to-Point, 5 Ghz, 1 Gbps, 100+ km, AF-5

1.012,⁵⁹ EUR

Item no.: AF-5
shipping weight: 26.50 kg
Manufacturer: Ubiquiti

📄 Product Description

airFiber 5 Point-to-Point, 5 Ghz, 1 Gbps, 100+ km, AF-5

Built for Speed and Range

Operating in the 5 GHz band, airFiber 5 builds on the innovations in airFiber 24 to enable speeds up to 1 Gbps and introduces new eXtended Range Technology (xRT) to provide 100+ km maximum range.Revolutionary Wireless Technology

Introducing airFiber, a truly revolutionary Point-to-Point wireless platform from (TM). Housed in a compact, highly efficient form factor, airFiber delivers amazing wireless Gigabit+ performance, low latency, and long range. airFiber ushers in a new era in price-disruptive wireless technology ideal for carrier backhaul, building-to-building enterprise use, or public safety applications.Efficient by Design

Every detail of airFiber was designed and engineered by the R&D Team. From the silicon chip up to the innovative split-antenna architecture, the R&D Team created airFiber to deliver superior throughput with efficiency. airFiber was purpose-built to create a high performance backhaul.Plug and Play Deployment

Based on s innovative and intuitive airOS, the airFiber Configuration Interface enables quick deployment. With installation efficiency in mind, the mechanical design allows easy installation by one person. A two-person installation crew can effectively install and align an airFiber link. To fine-tune the alignment, the received signal levels can be conveniently accessed via any of these methods:

- airFiber LED display
- airFiber Configuration Interface
- audio tone feature

Innovative Proprietary Modem Technology

s innovative proprietary modem technology was purpose-built to address the specific challenges of outdoor, PtP (Point-to-Point) bridging and high-performance network backhauls. Every aspect of the radio has been carefully simulated and designed to optimize range, speed, and latency performance in the harshest RF noise environments.Synchronous Data Transmission and Reception

Conventional wireless standards impose a latency by having to receive a packet before a packet is transmitted. airFiber can transmit data synchronously without any wait time. airFiber features traditional TDD and FDD modes of operation in addition to the proprietary Hybrid Division Duplexing (HDD) mode, which provides a breakthrough in range and spectral efficiency performance.

Based on the ranging algorithm built into the air protocol, the airFiber radios use patent-pending HDD technology to calculate the propagation delay and know when each radio can transmit and receive, so they send packets in precise synchronization. Packet transmission latency is virtually eliminated.Innovative Dual-Antenna Architecture

airFiber features a dual-independent, 2x2 MIMO, high-gain reflector antenna system. Separate transmit (TX) and receive (RX) antennas help extend link budgets by eliminating the extra RF losses caused by the switches or duplexers required in systems with common TX/RX antennas. Each airFiber radio has two complete antenna systems and a mechanical back-plane that are constructed as a one-piece monocoque molding – a radical departure from industry practice. Monocoque means that the exterior skin supports the structural load of airFiber hardware. Due to its single-piece,injection-molded architecture, airFiber adds lightness in weight and affordability to its list of advantages.Network Management

airFiber supports a variety of features to help you manage your network:

- Network management options: A choice between the greater security of out-of-band management and the convenient of in-band management.
- SNMP support: Full SNMP support to aid in network management.
- Local and remote airFiber status information: Available on the Main tab of the airFiber Configuration Interface.

- Operating frequency
  - FCC 15.247, 15.407, IC RSS 210: 5470 - 5600 MHz, 5650 - 5850 MHz
  - ETSI EN 301 893, EN 302 502: 5470 - 5875 MHz
  - Other Regions: 5470 - 5950 MHz
- Dimensions: 938.4 x 468.4 x 281.4 mm
- Weight: 16 kg (mount included)
- Max. power consumption: 40 W
- Power supply: 50 V, 1.2 A PoE GigE adapter (included)
- Power method: Passive Power over Ethernet (42-58 V DC)
- Certifications: CE, FCC, IC
- Mounting: Pole mount kit (included)
- Wind loading: 194 lbf (at) 125 mph
- Wind survivability: 125 mph
- Operating temperature: -40°C to 55°C
- LEDs: (12) Status LEDs, Data Port Link/Activity, Data Port Speed, ManagementPort Link/Activity, Management Port Speed, GPS Synchronization,Master/Slave, Link Status, Modulation Mode 0.25x to 4x, 6x, 8x,Overload, Remote and Local Displays (calibrated signal strength)
- Data port: (1) 10/100/1000 Ethernet port
- Management port: (1) 10/100 Ethernet port
- Auxiliary port: (1) RJ-12, alignment tone port
- Maximum throughput: 1.0+ Gbps
- Maximum range: 100+ km (dependent on regulatory region)
- Packets per second: 1+ Million
- Encryption: 128-Bit AES
- Forward error correction: 164/205
- Cyclic prefix: 1/16 fixed
- Uplink/downlink ratio: 50% fixed
- Radio frame synchronization: GPS
- Dynamic frequency selection: CE, FCC/IC

🖹 Specifications

Scan this QR code to view the product
All details, up-to-date prices and availability