What Is AirMax?

AirMax Products

Hardware Accelerated

AirOS 5

MIMO TDMA Protocol

AirMax MIMO Antennas

AirControl
AirMax Protocol Benefits

SCALABILITY

-802.11 protocol (based on carrier sensing) was designed for indoor networks where clients can “hear” one another. AirMax Protocol (based on TDMA) was designed for outdoors; hidden nodes are no problem.

LATENCY

-AirMax protocol has “smart polling” which senses voice/video packets and gives them priority. It also provides priority to “active” clients over “idle” ones to optimize perceived latency on large networks.

SPEED

-AirMax is based on latest 1x1 and 2x2 MIMO radio technology. 150Mbps+ real TCP/IP throughput in PtP mode and 100Mbps+ in PtMP
AirMax Products

AirMax BaseStation Platform

AirMax Station Platform

- BULLET M5
- NanoStation opc M5
- NanoStation M5
- PicoStation M5
- eWIfi
Rocket M Base Station

- Powerful BaseStation Hardware. 400MHz MIPS 24K, 64MB RAM
- 2x2 MIMO Radio; delivers speeds more than 5x previous solutions
- Ubiquiti Radio Front-End Design; hi-power, RX sensitivity, ACR performance
- Rugged enclosure design; will survive most extreme conditions
- Easily “snaps in” to any AirMax Sector or Dish Antenna for complete base station or backhaul solution
Bullet M Series

- No special MIMO antenna required; works with existing antennas
- Capable of 100Mbps Real TCP/IP throughput (4x 802.11a/b/g Bullet)
- Ubiquiti Radio Front-End Design; hi-power, RX sensitivity, ACR performance
- No RF cables required; can “plug in” to most grid and omni antennas
- Powerful enough to be used as a PtMP Base Station, CPE, as well as in PtP applications
NanoStation M

- Ubiquiti’s most versatile station product. Can be used for CPE, AP, PtP bridging, or video surveillance networks
- New 16dBi MIMO Antenna Array Design
- New Secondary Ethernet port with software enabled POE output
- More than 5x faster than 802.11a/b/g NanoStation
- Ubiquiti Radio Front-End Design; hi-power, RX sensitivity, ACR performance
Air OS V

- Air Max Capacity (AMC) and Air Max Quality (AMQ) metrics
- New UI look and feel
- 5/10/20/40MHz Channel Options
- Advanced QoS functionality (4 levels)
Air Control

- Manage 100’s of Ubiquiti Devices
- Access your network from anywhere; only need a web browser
- Customize ”groups” including SSID and FW version
- Mass firmware upgrade capability
- Standard compliant 802.3af 48V input
- 18V / 0.7A passive POE output
- Compatible with all Ubiquiti products and most 3rd party products
- Enables use of professional 802.3af 48V Switches with Ubiquiti products
- Ideal for long cable run lengths as higher voltage / lower current will have less power loss
Reflector Antennas

- Ubiquiti has an expanding line of dual polarized antennas that mate to the Rocket radio.
Reflector Antennas

- Product Range
  - 5.1-5.9GHz
  - 2ft Dish (30dBi)
Reflector Antennas

• Key Features
  – “Brick Wall” high pass filter
    • Everything below 3.7GHz is filtered out for the 5GHz versions
  – 70% Aperture Efficiency
  – EN300 and EN302 Specification compliant for backhaul applications
  – Integrated Rocket Mount
  – Fine Adjust Mounting Bracket
  – Optional Radome
MIMO Sector Antennas

- Patent Pending Beam Shaping Technology
  - Uses the radome and a shaped ground plane in conjunction to provide equal beamwidths and low sidelobes for both polarizations

120 degree Sector
MIMO Sector Antennas

- Plastic radome and metal shape combine to shape the beam
- Alternating element feed orientation maximizes cross pol isolation and minimizes pattern asymmetries.
MIMO Sector Antennas

- Patent Pending Dual Pol Technology
  - Parallel Feed
  - Low loss substrate

Wide band

High efficiency

High gain

No beam scanning with frequency
MIMO Sector Antennas

• Key Features
  – Equal Beamwidths for V and H polarizations
  – Low Sidelobes
  – Electrical Down tilt
  – Wide Band
    • 4.9-5.9GHz including Ultra High Gain Option
    • 2.3-2.7GHz
  – 90 and 120 sector options
  – Rugged Construction
Sector Antennas

- **Product Range**
  - 5.1-5.9GHz
    - High Gain
      - 90 Deg
      - 120 Deg
    - Mid gain
      - 90 Deg
      - 120 Deg
  - 2.3-2.7GHz
    - Mid gain
      - 90 Deg
      - 120 Deg