



# Introduction & Product Overview

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@GoMimosa



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# Corporate Overview








- 7-year anniversary ... Passionate about Broadband
- 5000+ ISP & enterprise customers
- Deployed in 177+ countries
- Carrier proven
  - Telco, Cable/MSO and ISP customers
- Global operations
  - Silicon Valley, Santa Clara
    - R&D: Hardware, platform & cloud SW
    - Sales, Customer Service and Marketing
  - Istanbul Turkey
    - R&D: Software
    - Customer Service
- Acquired by Airspan in November 2018

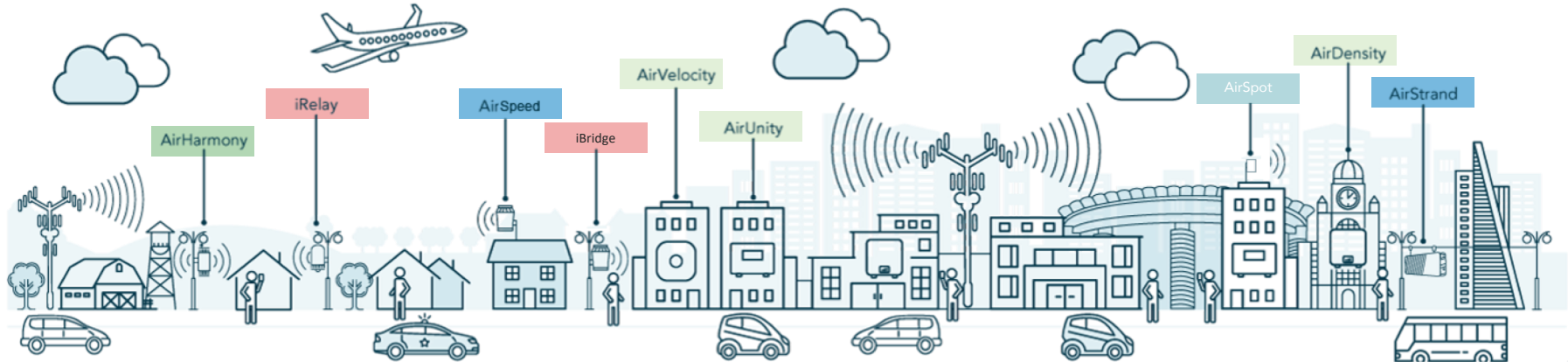
# Airspan/Mimosa – A Global Company





# Airspan 4G-LTE & Unlicensed Wireless Solutions

Compact Macro/Micro	Compact Pico	Indoor	Wireless Backhaul	CPE
				
AirHarmony	AirSpeed, AirStrand	AirVelocity, AirDensity, AirUnity	iRelay, iBridge	AirSpot

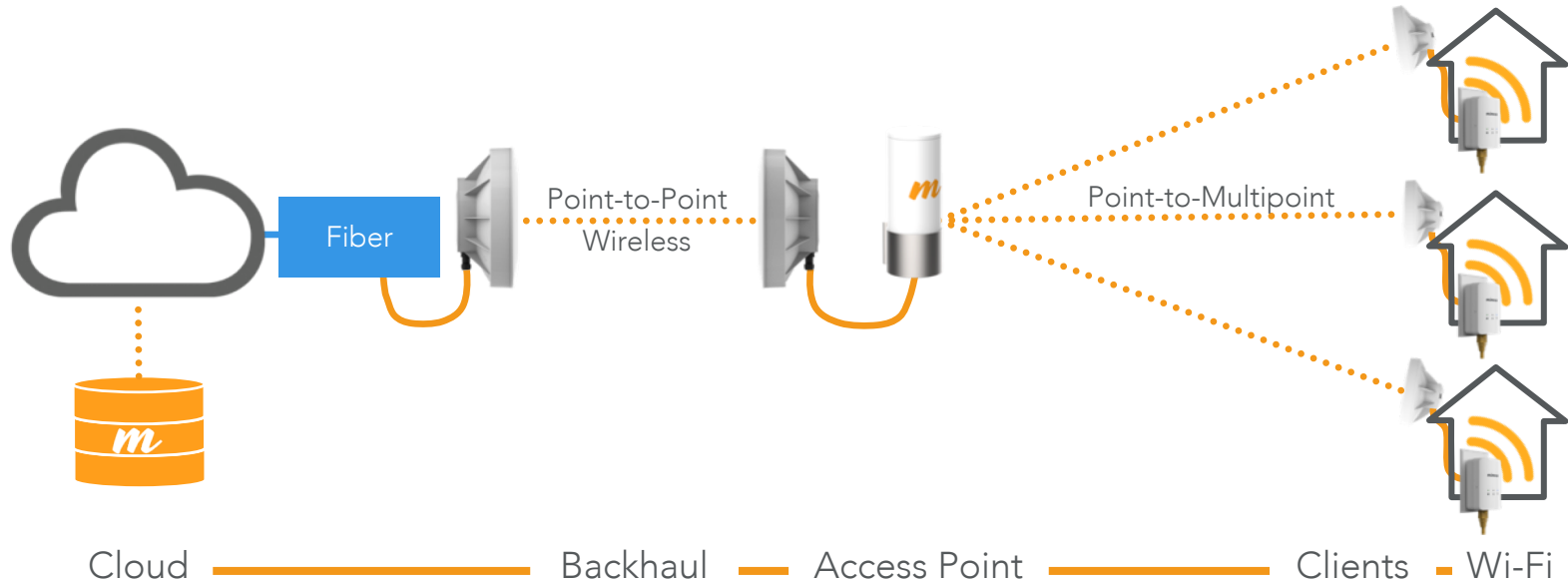






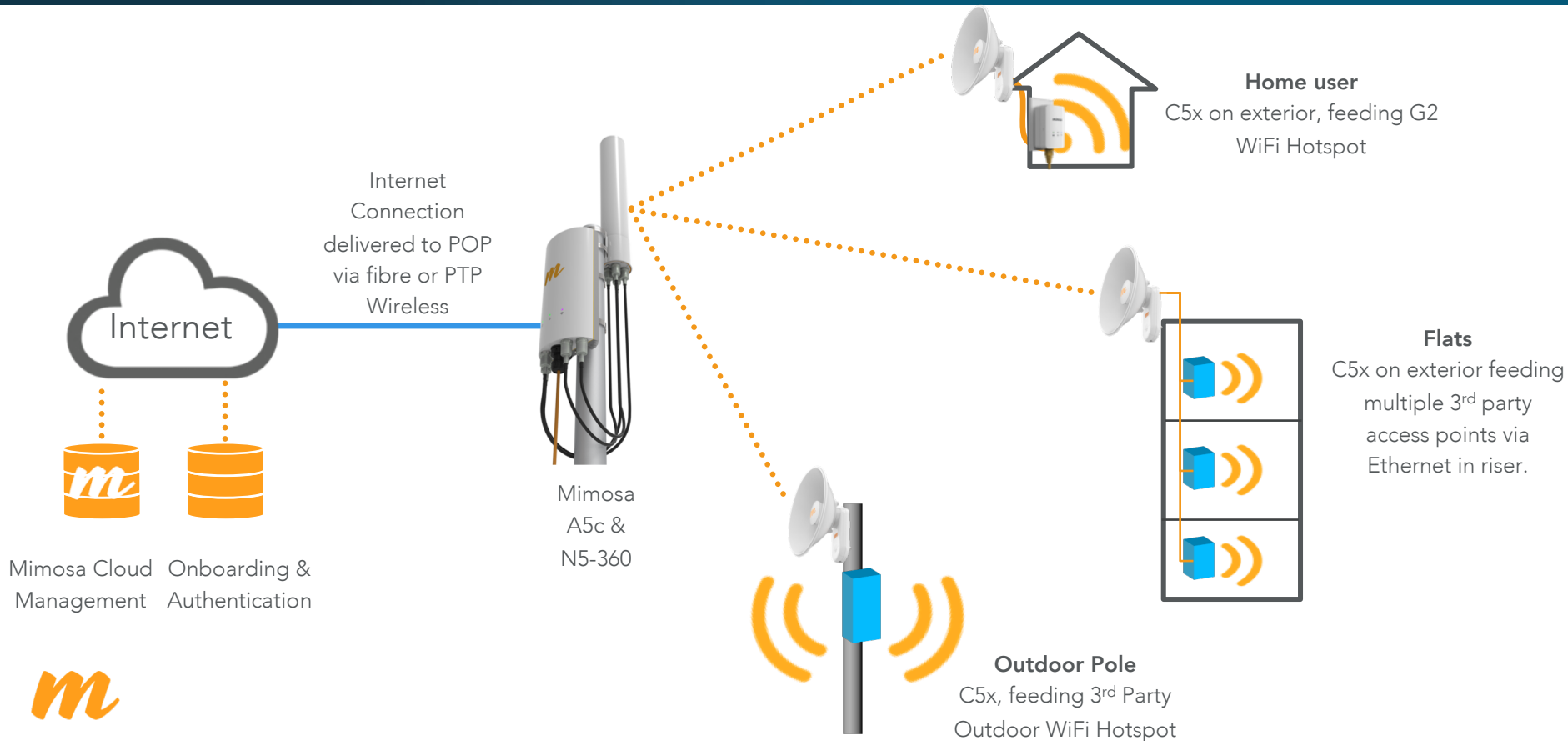
# PTP and PTMP Solutions

Our HFW solutions connect dense urban and hard-to-reach rural homes with the fastest deploy time and ROI.





# Mimosa WiFi Distribution Application



# Why Choose Mimosa?

MIMO

TDMA



SYNC

CLOUD

## ○ MIMO Technology

- Presenting 'Fiber-like' speeds to your users at a fraction of the cost of a dig.
- Multiple data streams on one antenna make best use of available radio spectrum.

## ○ TDMA Operation

- TDMA Radios offer better price/performance than FDMA alternatives.
- Close, integrated relationship with Quantenna, global leader and innovator of leading-edge performance Wi-Fi solutions.

## ○ SYNC Without extra Hardware

- GPS Synchronization built in as standard.
- Mimosa's SRS technology allows frequency reuse.

## ○ CLOUD Management as standard

- Free cloud management and network planning tool.

# Mimosa Family of Products

- Best price performance in the industry
- Robust, carrier class design and testing
- Licensed and Unlicensed Solutions to optimize applications
- Point-to-Point Backhaul and Point-to-Multipoint Access allowing end-to-end solutions





# Point to Point



**m** On board GPS for co-location and spectral efficiency



Multiple channel functionality for speed and resilience



# High Reliability Backhaul – 1 Gbps

1

Gbps



IP67



SRS

2x2

DualLink



B5

Dual Link  
Integrated



Mid-Haul

- Up to 10 km Collocation
- Integrated RF shroud + GPS sync

Resilient

- Dual Link for stability in noise

5150-5850 MHz

B5c

Dual Link  
Connectorized



Long-Haul

- Tower sector deployments

Customize

- Flexible panel/shield options

Collocation

- AP channel reuse via GPS sync

4950-6200 MHz

B11

Licensed Reliability



Licensed Long Haul

- 50 km+

Flexible Bandwidth

- Dynamic up/down traffic

Low Latency

- 1 ms round trip

10.0-11.7 GHz

B24

Unlicensed  
Integrated



Short-Haul

- Up to 3 km

Compact

- Small form factor (250 mm, 6 lbs)

Resilient

- Auto Interference Mitigation

24.00-24.25 GHz



# Cost-Effective Backhaul – 700 Mbps

700

Mbps



IP65\*

1 ms

latency



## C5c Connectorized PTP



### Long-Haul

- Customizable antennas
- 50km and beyond

### Low Latency

- 1 ms round-trip

### Affordable

- Industry best price performance

4900 -6400 MHz

## C5x Family Simple PTP Link



### Short-Haul

- Short to Medium PTP

### Flexible

- Single Radio support multiple Antenna

### Affordable

- Best integrated price performance
- Software Key Required

4900 – 6400 MHz





# Point to Multipoint



Highest industry tower scalability maximizes user subscriber capacity and speed



Only high-density residential wireless solution to deliver fiber-fast at a fraction of the cost



# Access Points

## Scalable, Unlicensed Multipoint Solutions

- Increased capacity at each site
- Ultra-high client capacity
- Network scalability perfected
- Fiber-fast speeds
- Add subscribers with ease



### A5

#### Quad Sector Access Point



#### Short-Range GPS-Sync

- Suburban applications at 300m\*
- Collocation and network-wide sync enabling channel reuse

4900 -6400 MHz

### A5c

#### Connectorized 4x4



#### Long-Range GPS-Sync

- Rural, tower long distance
- Collocation and network-wide sync enabling channel reuse

4900 – 6400 MHz

with Spectrum Reuse Synchronization (SRS) for best performance

# Unique Antenna Pattern

## Coverage like a sector

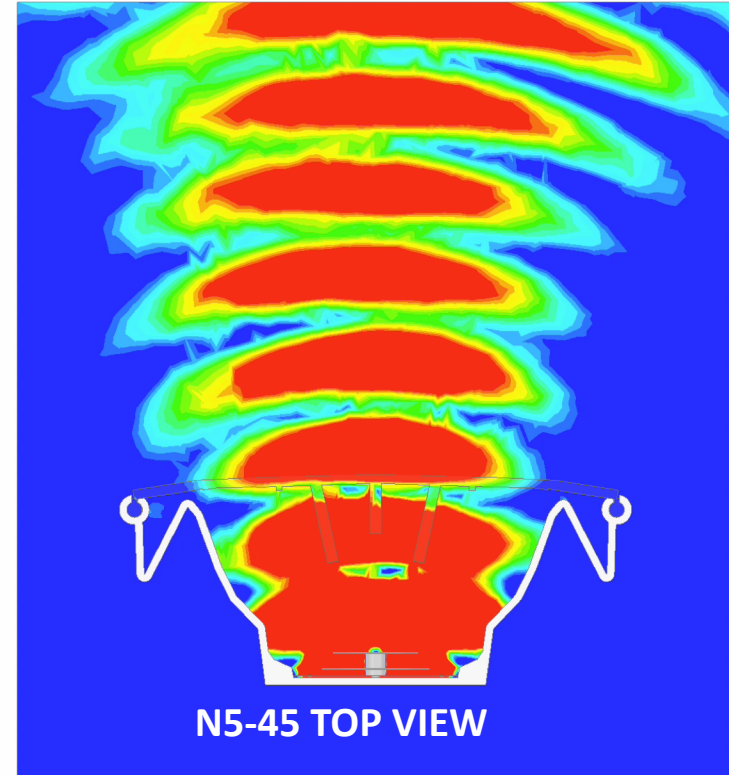
- High Gain
- 42° Azimuth
- 9° Elevation

## Noise fighting like a horn

- Massive side lobe rejection

## Industry Leading F/B ratio

- 43 dB





# N5-45x2 Sector Antenna

Gain	19 dBi
Azimuth	42° (HPBW)
Elevation	9° (HPBW)
F/B	43 dB
Downtilt	2°
Polarization	Dual Slant 45°
For use with Mimosa or any 2x2 radio	



Frequency 4.9 – 6.4 GHz





# N5-45x4 Sector Antenna

- Gain 22 dBi (with 3 dB BF gain)
- Azimuth 42° (HPBW)
- Elevation 9° (HPBW)
- F/B 43 dB
- Downtilt 2°
- Polarization Dual Slant 45°
- Designed for beamforming with Mimosa 4x4 A5c or two 2x2 radios on separate channels



4 Type N



IP55



Slant 45°

Frequency 4.9 – 6.4 GHz





# N5-360° 15 dBi MicroPoP Antenna



465 mm  
(18.3")

- 4 stream beamforming 360° antenna
- Ensures 2 equal MCS streams/client
- Beamforming via even patterns across antenna polarizations
- Longer range 500m coverage
- Similar cost structure to A5 but with A5c

4900-6400 MHz with GPS-Sync

Designed for Mimosa's A5c Access Point





# New! Mimosa A5x Access Point



4.90-  
6.40  
GHz

IP  
500  
Mbps

2x2  
MIMO

SRS

IP67

27  
dBm

9-12.9 W

- Full-featured, 2x2, Connectorized, UBR, Fixed Wireless PTMP access point
- **Supports 44 clients in SRS/GPS Sync mode, and 66 clients in WiFi Interop mode**
- Collocation and network-wide sync, enabling channel reuse
- Ultra-rugged IP67
- Low-power consumption for battery back-up operation
- Wide-range 24-56 VDC passive PoE input
- Supports a wide range of antennas with integrated mount
- **Available Q4 2019**

<https://youtu.be/vpMuBaVNVIM>

## Blazing fast, rugged clients

- Fiber speeds to the home
- TDMA GPS sync client
- Rugged and affordable
- Mounting options galore
- Compact and powerful
- Flexible antenna options



## C5c Connectorized PTP



### Long-Haul

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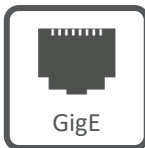


# G2 2.4 GHz Wi-Fi PoE Gateway

- Simple Integrated PoE + Great Wi-Fi
- Add Multiple G2 Devices to Expand Coverage
- Cloud Monitoring for In-Home Wi-Fi Support
- Totally Integrated Experience with Mimosa C5x/C5c

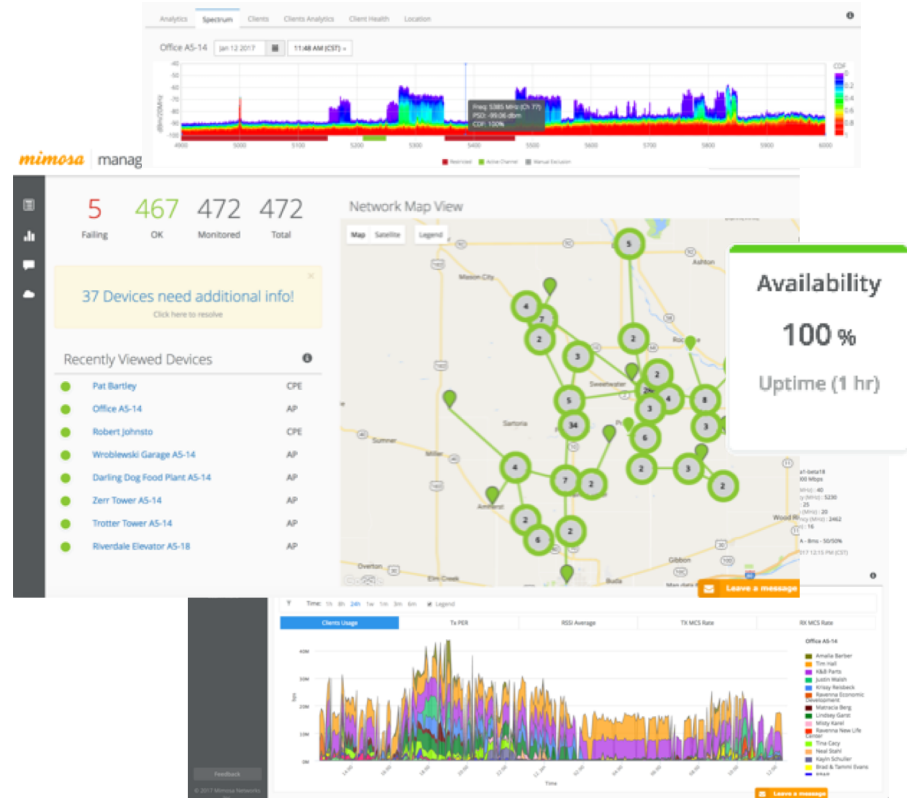
100+  
Mbps

2.4  
GHz





- Historical performance and RF data
- Network wide advanced spectrum and wireless maintenance
- Advanced Firmware management automation
- Device status monitoring
- In home Wi-Fi monitoring and Client Health statistics



# TOP REASONS TO CHOOSE

## PERFORMANCE



Best Price Performance  
Delivers Hundreds of Mbps Per Subscriber  
Full Gigabit Throughput in Either Direction

## EASE OF USE



Cloud-Based Link Planning and Network Design Tool  
Common Interface Across Products  
Simple and Easy Installation

## SUPPORT



Award-Winning Live Support, Not Just a User Forum

## TECHNOLOGY



Network-Wide, Integrated GPS Synchronization (SRS)  
Non-Intrusive, Integrated Spectrum Analyzer Across Multiple Clients  
Auto-Everything Feature with Automatic Interference Mitigation  
Dual-Link Operation for Reliability and Throughput  
Extended Frequency Support (4.9-6.4 GHz)  
DFS Channel Support

## VALUE



Lowest Cost Per Bit  
Highest Spectral Efficiency Per Dollar



## PRODUCT DESIGN



Elegant and Compact  
Lightweight and Power-Efficient

*mimosa*

