https://www.yeniwave.com

*Air*Point

Advanced MIMO OFDM

About YeniWave Telecom

It's been our mission since founded in 2005 to replace the cables concept from the network in general, and it remains our legacy, now we adopt a new mission for our business future of creating highly-reliable, cost-effective, high capacity wireless solutions that deliver on their promises.

The *Air*Point 51E-M2-1-B (867 Mbps) (51x-M2-x) Single Radio is an intelligent dual radio wireless backhaul that integrates the benefits of two links radios into a single unit for ultimate operational flexibility.

The low latency and low jitter provides reliable delivery of delay sensitive services including Voice over IP (VoIP), high definition video and prioritized data traffic.

In the Link Aggregation mode, the *Air*Point provides up to 867 Mbps of useful data throughput and in the Repeater mode, links can span up to 25 miles (40km).

*Air*Point 51E-M2-2-B (867 Mbps)
*Air*Point 51B-M2-2-BS (Sector antenna)
*Air*Point 51B-M2-1-CD (Integrated antenna)

System Feature

- Advanced MIMO OFDM Radio Platform
- Raw data rates up to 867 Mbps using 2x2 MIMO OFDM
- Supports extended 4.9-6.1 GHz licensed bands
- Range up to 40 km PTP and 5km PTMP.
- Data Throughput up to 530-650 Mbps
- DFS and TPC features for regulatory regional compliance
- Carrier-class OS and resiliency features
- Rugged environmental IP67 waterproof enclosure
- 200Km/h Wind Resistance
- Near & Non LOS Resistance
- CPE can be used indoors
- Near & Non- LOS Operation
- Network interfaces 10/100/1000

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About Our OFDM Range

AirPoint standard radio solutions deliver the performance, reliable connectivity, and cost-effectiveness that are crucial to modern wireless broadband networks. Our scalable wireless platform delivers superior performance even in demanding conditions, with the flexibility and features to enable a wide range of applications. AirPoint OFDM Radio technology combines the best hardware and software technology to ensure best possible network performance

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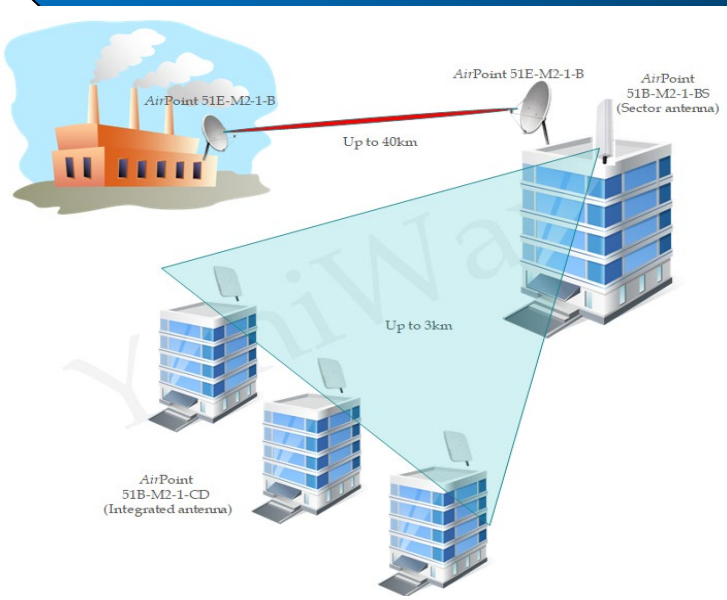

Applications

- Point-to-Point or Point-to-Multipoint Data network segments
- Wireless ISP or Hotspots
- Fast Roll-out & Temporary Deployment

Embedded Router Platform

***Air*Point** FDM radios from Yeniwave are high-performance carrier-grade Radio Solutions. They embody state-of- the-art software-defined-radio hardware, coupled with a powerful carrier-class router operating software with advanced Layer 3 Bridging and Layer 3 Routing features:

- High performance CPU, 880 MHz, 256 Ram, 16 MB Flash, Ip Bridging
- Slandered 802.11a/n/ac, Layer 3 IP Routing
- Advanced Networking features
- -40°C .. +70°C
- 867 Mbit/s raw data rate using 2x2 MIMO features offers up to 80+ Mbps throughput.
- Ethernet-over-IP (EoIP) interfaces
- Virtual Router Redundancy Protocol (VRRP)
- Enhanced Wireless Performance
- *Air*Point OFDM radios from Yeniwave offer major advantages over competing radio.
- Radio using powerful DSP technology Extensible Feature Set
- Border Gateway Protocol (BGP)
- Optional proprietary streaming wireless protocols - improve P2P and P2MP wireless links through packet optimization.
- Uplink and downlink bandwidth control on a per-user basis
- DHCP Client and Server
- Network Address Translation (NAT), Support TDD/FDD transmission

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Primary Specifications	
Range	Up to 40km for PTP or more with suitable external antennas and 5km for PTMP
Bandwidth	Bandwidth up to 530-650Mbps (867Mbps raw speed) in AC 2x2 MIMO mode
Power Consumption	11W; 10-30V fed Passive PoE, or 10-30V from 2 (PoE-IN, DC jack)
Operating Temp	-40°…+70° C

System				
Frequency Bands (GHz)	5GHz: 4.920-6.100 (5 MHz step)			
Radio Type	Direct Sequence Spread Spectrum (DSSS)			
Modulation	5GHz: OFDM (BPSK, QPSK, 16-QAM, 64-QAM); Dynamic			
RF Channels & Latency	13 Channels, < 3ms latency			
Sensitivity & Receiver Threshold (dBm)	**5 GHz**	**Transmit (dBm)**	**Receive Sensitivity**	**@FER=0.08:**
	6MBit/s	27	-96	27dBm / -96dBm
	54MBit/s	24	-80	23dBm / -81dBm
	MCS0	26	-96	26dBm / -96dBm
	MCS7	23	-79	23dBm / -77dBm

Radio Data Rate	
At 5GHz (*Normal Mode*)	54, 48, 36, 24, 18, 12, 9, 6 Mbps, auto-fallback
At 5GHz (*N 2X2 Mode*)	300, 270, 240, 180, 120, 90, 60, 30 Mbps, auto-fallback
At 5GHz (*AC 2x2 Mode*)	867, 780, 650, 585, 520, 390, 260, 195, 130, 65 Mbps, auto-fallback

Wireless			
Compatibility	Proprietary modes; also back-compatible and fully interoperable with IEEE 802.11a/b/g compliant products		
Radio Architecture	Support ad-hoc, peer-to-peer networks and infrastructure communication to wired Ethernet networks via Access Point		
Security	64/128-bit WEP data encryption; WPA, WPA2, TKIP, CCMP, AES; Proprietary modes		
External Antenna	For use with External Antennas - 2xN connectors		
Integrated Antenna		*Air*Point 51E-Mx-1-C (867Mps)	*Air*Point 51B-Mx-1-x (Integrated antenna)
	Gain	2x23 dBi Directional Gain	2x18 dBi - Sector 2x14 dBi – integrated
	Polarization	Dual H&V in One Case	Dual H&V in One Case
	Frequency range	5.1 - 5.9 GHz	5.1 - 5.9 GHz
	Beam width	H&V 10°	Hor. 90° & Ver. 6° - Sector H & V 38° - Directional
	Dimension	38.6cm x 38.6cm x 12cm	632x158x64mm/24.88x6.22x2.51 - Sector 185x185x63.5mm/7.28x7.28x2.5 - Directional

1. Not all frequencies and channel bandwidths are available in all regions.
2. STBC Space Time Block Coding results in additional 3 dB total output power. Output power may be limited by local regulations.
3. Bi-directional Ethernet throughput with 1518 byte packets including overhead @ 1.6 km distance. Actual user throughput will vary depending on modulation, channel bandwidth, packet size and distance.
4. Terms and conditions apply. Consult your YeniWave Sales representative for more information