

## Enabling Cost-Efficient Next-Generation IP Services

High-capacity, low-latency IP-based licensed backhaul is critical for enabling 4G services (data, voice and streaming multimedia) across wireless networks. Fiber and other backhaul solutions are often too costly to implement and unreliable and difficult to scale when needed.

We work with you from the very start of the design and deployment process to provide you with a comprehensive, quick-to-deploy solution that minimizes CAPEX and OPEX and future-proofs your network.

Our backhaul solution is based on DragonWave's patented IP-based technology that provides the high capacity (up to 800 Mbps) and low-latency (<.1 ms) needed to enable or modernize wireless networks for 4G services. Because our technology is Ethernet-based, you can easily apply it to last-mile and mid-mile applications, thus eliminating some if not all of your costly ILEC leased services, while optimizing your investment in remaining legacy technology, plants and facilities.

NextWave's backhaul can also readily integrate with GO Networks' Wi-Fi and IPWireless TD-CDMA and forthcoming WiMAX-based network products. Once installed, the backhaul is built to work with NextWave's network management system (NMS). We can even directly provide affordable licensed spectrum required for QoS through our company's national and international spectrum holdings.

## Highly Scalable, Reliable, Future-Proof Architecture

The NextWave backhaul architecture (see Figure 1) enables easy scalability, as your network needs increase beyond the capacity, reliability and availability limits of fiber and other backhaul options.

Apply our solution throughout your network or gradually to mid-mile or last-mile sections as required. The small footprint and indoor/outdoor product options can be easily and readily adapted to existing facilities or to target areas. In this way, you can grow your network as your customer demands increase or require 4G services, even if not immediately. You no longer have to rely on the ILECs' limited supply of fiber, their high leasing costs and varying service reliability.

Unlike unlicensed backhaul, you can also be assured of the reliability and QoS that our solution provides through low-latency, zero interference and 99.999% availability.

## Proven Wireless IP Networking Expertise

Each senior team member of the NextWave design and backhaul team has over 20 years experience, specifically with wireless networks. They have expert knowledge of the unique challenges of deploying a wireless network and have developed architectures and best practices that not only minimize costs but are also adapt to future needs and opportunities.

### Key Benefits

- Enables 4G services
- Lowers CAPEX and OPEX
- Expedites market service velocity
- Replaces complex and costly ILEC leased services
- Increases customer satisfaction

### Key Features

- Up to 800 Mbps capacity full wire-speed duplex bandwidth
- Ethernet-based
- Pre-integrated with NextWave Design, Deployment and NMS
- Zero Interference
- 99.999% availability
- Works with both licensed and unlicensed spectrum
- Highly experienced professional services
- Highly scalable

### Channels Supported

- 11 GHz
- 13 GHz
- 15 GHz
- 18 GHz
- 23 GHz
- 24 UL
- 24 DEMs
- 26 GHz
- 28 GHz
- 38 GHz

### Other End-to-End Solutions

- Wi-Fi, TD-CDMA and WiMAX
- Licensed Spectrum

- ❖ Full duplex Multi-Megabit Capacity 99.999% two-way propagation annual availability
- ❖ Ethernet optimized for native IP at low latency—maximum 400µs, typically 200µs per cross-section
- ❖ Licensed frequency bands

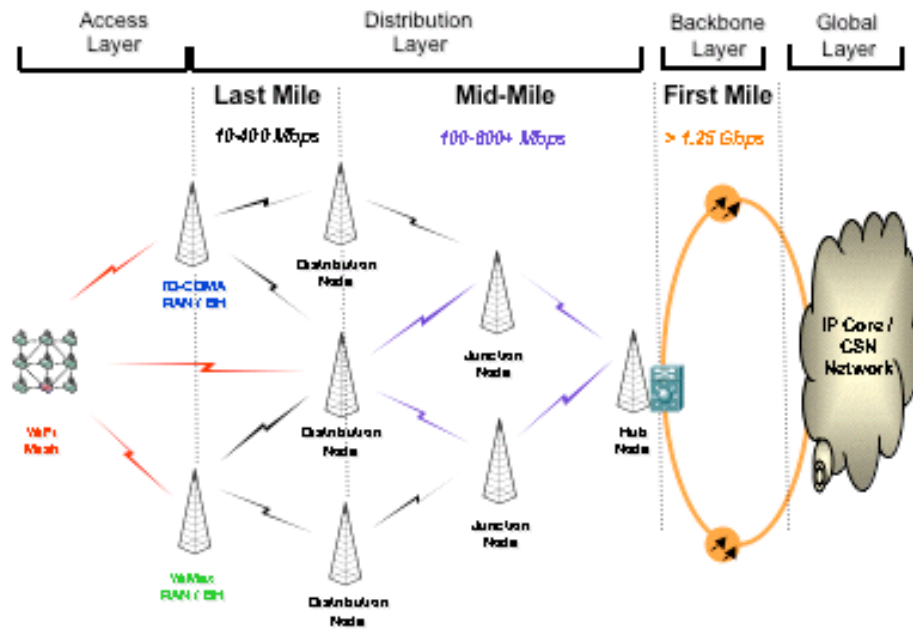


Figure 1 - Multi-Layer, Scalable Architecture

Feature	AirPair Release 4	Horizon Compact	Horizon Duo
Split Mount Option	✓	✗	✓
All Outdoor Option	✓	✓	✗
Modem/Radio Integration	✗	✓	✗
Fast Mesh Switching	✓	✓	✓
Flex Scalability	✓	✓	✓
Jumbo Frames, 802.1p, 802.3x	✓	✓	✓
SNMP v3, Radius, CLI, Web GUI	✓	✓	✓
Integrated Fast 1+1 and LACP Capability	✗	✓ (Release 2 S/W)	✓ (Release 2 S/W)
XPIC support	✗	✗	✓ (Release 2 S/W)
Radio Tuning Bandwidth	300 MHz	500 MHz	300 MHz
Radio Head Switching Only	✓	✓	✓
Modulation	Up to 64QAM	Up to 256QAM	Up to 256QAM
Modulation Shifting	✓ (10Sec)	✓ (100ms)	✓ (100ms)
ATPC	✓	✓	✓
Capacity	400 Mbps (W/DPRM)	800 Mbps (with DPRM)	1600 Mbps (with DPRM)
Latency	<.2 ms	<.1 ms	<.1 ms
High-Power Radio Support	Yes	Yes	Yes

Table 1 - Comparison of Backhaul Technology Options

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## Cost-Efficient Backhaul for New IP Services

NextWave Broadband Inc., a subsidiary of NextWave Wireless Inc., develops next-generation wireless broadband products and technologies for mobile device and network equipment manufacturers, and for wireless service operators. Our products and technologies include WiMAX baseband ASICs, multi-band RFICs, device reference designs, and advanced network components, all designed to provide a small footprint, lower-power, high-performance solution for manufacturers of wireless broadband mobile devices. NextWave Broadband has more than 370 employees located in San Diego, CA; Henderson, NV; Calgary, Canada; São Paulo, Brazil; and Seoul, Korea.

3611 Valley Centre Drive | San Diego, California 92130 | 858.480.3100 | [nbinfo@nextwave.com](mailto:nbinfo@nextwave.com) | [nextwave.com](http://nextwave.com)

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