

Exalt unveils 4G/LTE-Ready microwave backhaul platform delivering fiber speed at a fraction of fiber cost

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New platform slashes deployment time and total cost of ownership while mitigating network congestion for service providers, enterprises, and government agencies



Amir Zoufonoun, CEO of Exalt Communications

Exalt Communications recently unveiled its newest microwave backhaul platform, ExploreAir™, delivering the industry's highest throughput and longest range in the microwave and millimeter wave spectrum. With speeds exceeding 500 megabits per-second full duplex for all Ethernet packet types and sizes, systems built on the ExploreAir platform offer the highest capacity in their class, and include a built-in compression option enabling speeds up to 1000 Mbps with a single carrier and in a single channel.

With this fiber-like performance, these systems are ideal for next generation 4G/LTE mobile and WiMAX backhaul supporting bandwidth-hungry devices such as air cards, smartphones, and Apple iPad. For fixed-line operators, cable operators, and tower companies who are building new high capacity metro Ethernet backhaul and access networks, these systems provide the fastest time to market and the lowest cost alternative. Within WISP, enterprise, and government agencies, ExploreAir is ideal for building new ring or mesh mixed-mode fiber/microwave networks.

"Mobile backhaul transport networks are in transition. In yesterday's 2G networks, most cell sites got

by with 1 or 2 T1/E1 lines to backhaul voice and SMS traffic,” stated Michael Howard, principal analyst and co-founder of Infonetics. “To support 3G and 4G services, however, cell sites will need up to 300 megabits per-second of backhaul capacity to support subscriber demand. The only way to deliver the promised 10+ megabits per-second of bandwidth to each user is to split the RAN infrastructure into much smaller cells, and each of these will need a new high capacity backhaul connection. We’ve been impressed with the many dimensions of flexibility in Exalt products and expect that operators will want to evaluate ExploreAir systems, which are designed to solve small cell and other backhaul bottlenecks.”

The first ExploreAir systems, available now, support world frequency bands from 2 to 40 GHz in a compact, lightweight all-outdoor configuration. These zero-footprint systems feature Exalt’s unique errorless and jitterless adaptive modulation with integrated QoS, which extends link distance, reduces antenna size, and dynamically allocates priority to TDM and IP traffic on the same link, significantly lowering overall CAPEX costs. The systems also feature Exalt’s exclusive, field-replaceable diplexer technology, which translates to zero lead-time and allows single-unit sparing for an entire band, reducing the cost of spares by 50% to 90% compared to split-mount or other all-outdoor systems. As a result, Exalt ExploreAir systems deliver the highest value with the lowest cost per megabit-mile (CPMM) and the lowest total cost of ownership (TCO) of any systems in their class.

“We use Exalt systems exclusively in our backhaul network, and we have now added an ExploreAir system to increase capacity on one of our links,” said Chris Neklason, CEO of Cruzio, the largest Internet service provider in Santa Cruz County, California. “The throughput is amazing, truly fiber speed, and the low latency has given our network a performance boost to support our enhanced services. The system was also exceptionally easy to deploy and manage. Exalt just keeps producing systems that deliver on their promises, and that helps us continue to grow our business, lower our operating costs, and increase our profitability.”

Designed for easy tower or rooftop installation using PoE, the zero-footprint ExploreAir systems can scale up to 500 Mbps full duplex plus 4T1/E1 via software license key upgrades, as network requirements grow. With a built-in compression option, and depending on the traffic type, these systems can deliver up to 1000 Mbps full duplex in a single channel. Link capacities can also be increased using the system’s built-in capacity aggregation capability. Other software features include 128- and 256-bit AES encryption, SNMPv3 remote management capabilities, built-in multi-port switch and spectrum analyzer, and embedded operating manual.

“New high capacity applications, including the thousands now available on smartphones and other devices, are exhausting network capacity,” said Amir Zoufonoun, CEO of Exalt Communications.

“While operators want to provide a high level of service, the cost of new equipment is often prohibitive and doesn’t scale. At Exalt, we understand the challenges that mobile operators and enterprises are facing. ExploreAir is yet another pay-as-you-grow solution from Exalt that delivers future-proof backhaul functionality with gigabit Ethernet capacity, while lowering operating costs to support both legacy TDM and new IP applications over the same network.”

The Exalt Microwave Backhaul Product Portfolio

All Exalt microwave backhaul systems – indoor, outdoor, and split-mount – offer guaranteed link availability, guaranteed throughput and low, constant latency. Systems are available in world bands from 2 to 40 GHz and in capacities from 10 Mbps to more than 1000 Mbps per channel, providing a range of options to fit countless network applications. Designed to enable a smooth transition to IP, they offer native support for both TDM and Ethernet, and are fully software configurable and upgradeable. For easy and secure management using third-party network management systems, Exalt systems support SNMP v1, v2c and v3. Data security is provided by available FIPS 197-compliant AES 128-bit and 256-bit encryption that adds zero latency to the transmission. To simplify installation and maintenance, all Exalt systems feature an embedded manual and most include a built-in spectrum analyzer.

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