NetBeam 2G1

Product Highlights

The NetBeam 2G1 radio delivers ultra-high capacity wireless point-to-point Ethernet connectivity that future-proofs your backhaul network. With a throughput of 1000 Mbps full duplex over the uncongested 71-76/81-86 GHz spectrum using FDD, mobile operators can deploy affordable, high capacity wireless links that are easy to install and maintain.

The NetBeam 2G1 radio is based on Netronics' advanced integrated-silicon technology, which increases reliability and reduces size and cost. The result is a very small, very light radio with a 90-year MTBF and an unbeatable price/throughput.

The E-band spectrum is uncongested, even in dense urban areas. Use of a high-gain, pencil-beam antenna guarantees available spectrum anywhere and maximizes spectrum re-use. E-band also offers low licensing fees and quick licensing processes.

High throughput and low latency combine to deliver fiber-like performance. The NetBeam 2G1 incorporates Hitless Adaptive Bandwidth Coding and Modulation for high availability. And an integrated L2 switch and extra port enable service differentiation and SLA guarantees without the need for additional equipment.

- Future-proof Gigabit throughput, you won't have any near term visits to the site to upgrade capacity
- Always find spectrum in the 71-76/81-86 GHz E-band. Thanks to a narrow beam width, there is zero interference. It's also lightly licensed in most of the world, with lower costs and an extra quick licensing process
- Advanced all silicon integration increases reliability and reduces prices, so you get a high ROI and the lowest price/Mbps
- Carrier-grade 74-yr MTBF
- Proven high availability in any weather condition (including monsoons and hurricanes) so your users enjoy consistently high performance
- Think small – small power consumption (PoE), small size (31cm/12" diameter), and very light weight
- Quick and simple installation, "as easy as wi-fi" is what our customers say about it.

Product Specifications

Radio	
Frequency Band	71-76/81-86 GHz
Duplexing Scheme	FDD
Modulation	QPSK-1/QPSK-2/QPSK-3/QAM16/QAM64
Adaptive Rate	Hitless adaptive bandwidth, coding and modulation, boosting system gain by 25 dB
Throughput	1000 Mbps full duplex
Link Budget (BER=10^{-6})	182 dB (including 1 ft antenna gain)
Interfaces	2xGbE ports: 1000BaseT ports
Antenna	Integrated 1 ft (31 cm), 43 dBi
Power	PoE+ (IEEE 802.3at with power boost)
Ethernet features	IEEE 802.1d Transparent Bridging QoS aware forwarding Jumbo frames up to 16k
Network Topologies	Ring, daisy chain and mesh
Encryption	AES 128-bit and 256-bit
Management, provisioning & commissioning	Web GUI (one click management of local & remote units), embedded CLI, SNMPv2/3, in-band, out-of-band Zero touch turn-up, TACACS+, RADIUS
Regulatory	ETSI EN 302 217, FCC 47 CFR part 101, CE marked, EMC, safety UL60950

Environmental	
Operating temperatures	-45°C to +55°C
Ingress protection rating	IP67
Dimensions	
ODU	(H x W x D) - 24.5 cm x 22.5 cm x 7 cm (9.7” x 8.9” x 2.75”)
ODU + 1 ft antenna	(Dia. x Depth) - 31 cm x 13 cm (12.2” x 4.3”)
Weight	
ODU + 1 ft antenna	4.5 Kg (9.9 lbs)

Netronics

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