

Key Differentiators

High Speed 115 kbps – 8.8 Mbps over-the-air throughput. XetaWave's proprietary DSM technology offers superior throughput and levels of sensitivity.

Link Adaptation Dynamic data rate automatically adapts communication parameters to achieve optimal link performance.

Single Radio Repeater

There is no network throughput degradation when using Xeta-XX radios as repeaters.

Multi-Speed TDMA

Unique to XetaWave, a *single* radio can have multi-logical data channels with different speeds. This allows for the prioritization/trade off of reliability versus speed.

Ethernet Switch Two independent Ethernet ports, each with full VLAN support and configurable as access ports, trunks, or mixed.

Serial Bridge Seamless integration for hybrid networks utilizing both Ethernet and legacy serial devices.

500 mW Adjustable power output from 10 mW to 500mW (+10dBm to +27dBm).

The **Xeta-XX ("Double X")** is XetaWave's newest offering, expanding on its innovations and representing a whole new way of communicating in congested ISM bands. To the user, the Xeta-XX looks like a single radio operating into a single antenna. Internally, the Xeta-XX has two independent data channels operating on two separate non-interfering frequencies. Each channel dynamically and transparently sends data.

Point-to-Point For point-to-point applications each Xeta-XX channel is allocated data based on its capacity and interference level. As a result, even with a 50% interference level, the user will still get the same throughput as if the band was interference free. When the interference level is lower, the data throughput of the radio increases up to twice that of our standard radio (Xeta9-E and Xeta24-E) - to 8.8 Mbps.



Point-to-Multipoint For point-to-multipoint networks, a Xeta-XX master can either communicate with Xeta-XX remotes to attain the higher data rate and interference performance *or* the two data channels can independently communicate with two different remotes at the same time. This can effectively double the polling speed using a single antenna. The two channels can each be set to different bandwidth ranges within XetaWave's proprietary Multipoint MultiSpeed™ protocol allowing low speed/long distance remotes to use one channel while higher data rate remotes use the other.

Remote/Repeaters As a repeater, the Xeta-XX functions as a single radio using a single antenna remote/repeater without causing any degradation in the network bandwidth. Until now single radio repeaters required the network to wait for all data to be repeated in a "bucket brigade" fashion. This effectively halves the bandwidth of the network.

Dynamic Modulation As with all XetaWave radios, the Xeta-XX is a software defined radio that automatically optimizes parameters across three axes - power output, channel size, and modulation. For the Xeta9-XX, this dynamic modulation allows for data transfer rates from 115 kbps to 8.8 Mbps, power output from 10mW to 1W, and variable channel sizing from 250 kHz to 1.5 MHz. The Xeta-XX selectively switches modulation schemes to ensure required throughput given available channel sizes and environmental noise. Based on its patent pending Dual Decode Digital Architecture™, XetaWave's technology platform offers performance second to none in the commercial market today.

Multiple Frequencies Supported The Xeta-XX is available as follows: Xeta9-XX for 902-960 MHz, Xeta24-XX for 2.4 GHz, Xeta924-XX that includes both 900 MHz & 2.4 GHz, and Xeta924-XXI which is a 900 MHz & 2.4 GHz in an enclosure with an integrated antenna. Please refer to the specific product data sheets for detailed performance specifications.