XetaMESH™

High Bandwidth MESH Protocol

KEY FEATURES

- Over 40 Mbps aggregate RF data rate.
- Up to 4.4 Mbps RF data rate per channel.
- 900 MHz enables non-line of sight communications.
- True HoPing protocol overcomes interference.
- Available as a firmware upgrade for all Xeta9 900 MHz and Xeta24 2.4 GHz Linux radios.
- Redundant failsafe network synchronization.
- Seamlessly incorporates XetaWave's serial and IO radios within the same network without collision.
- Will not interfere with co-located XetaWave 900 MHz backhaul.
- Optimized for dense networks.
- Automatic multispeed modulation selects the optimum speed for each

XetaWave's new mesh protocol, **XetaMESH**, is the best solution for dense peer to peer redundant wireless communication networks. **XetaMESH** is a protocol that is enhanced with synchronized random hopping. 15 orthogonal non-interfering channels allow simultaneous transmissions even when radios are close in proximity. The result – **over 40 Mbps aggregate RF data rate with 4.4 Mbps channel RF data rate**.

High Speed Well Pad Communication

A typical application for **XetaMESH** is high speed well pad communication. Unlike conventional 2.4/5 GHz wireless routers, **XetaMESH** can operate at 900 MHz which is a key differentiator since 900 MHz is very effective for non-line of sight environments and eliminates the need for repeater links which increase latency and reduce throughput.

What happens if your 2.4/5 GHz wireless router is located behind a tank? With **XetaMESH** a repeater is not needed. For communications that require a mesh repeat function, **XetaMESH** uses a loop-avoiding distance-vector routing protocol to automatically converge on the shortest path and lowest cost route robustly and efficiently in a dynamic RF environment.

XetaMESH can also co-exist with non-mesh XetaWave networks by simply dedicating one of its 20 channels to non-mesh communications.

XetaMESH is supported in all Xeta9 900 MHz Linux radios, the Xeta9x low cost 900 MHz Emancipator board level radio, and the Xeta24 2.4 GHz Linux radios.

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