



Outdoor Wireless Networking Solutions

GNS Wireless WLAN solutions is optimized for the new IEEE 802.11n standard. GNS Wireless hotspot equipment packages deliver better deployment of 802.11N systems, better RF coverage, a smooth migration from legacy Wi-Fi to 802.11n, and full performance of 802.11n today, without the need to redesign the wired network infrastructure.

The underlying 2x2 MIMO, and 3x3 MIMO technology behind 802.11N Wi-Fi improves range and coverage by increasing diversity at the device level – additional antennas and multiple streams of data. With automatic Channel selection architecture, GNS Wireless hotspot solutions add diversity at the system level – all APs (access points) operate on different channels, using the 5Ghz mesh backbone as the connectivity from point to point and this provides multiple opportunities to receive client transmissions. Combining the two approaches results in a powerful solution that delivers the best coverage of any enterprise WLAN solution for outdoor wireless hotspots.

Conventional WLANs and residential wireless routers and wireless access points have trouble dealing with the unpredictable coverage patterns of outdoor 802.11n wireless networks , making it difficult to design a cellular WLAN with minimal cell overlap. GNS Wireless designs our outdoor wireless networks with overlapping coverage from adjacent APs, making the 802.11N outdoor wireless network much simpler to deploy. Our approach also maximizes range, minimizes interference, and extends the wireless signal beyond the reach of typical wireless routers, and access points. GNS Wireless stocks a wide variety of access points, from top manufacturers that are available with either two or three radios that are able to support a mixed 802.11a/b/g/n environment enabling physical separation of very slow and fast devices, all from the same physical AP. The Teletronics EZplatform+, for example, delivers dual spatial streaming radios bringing 300Mbps air rate and 2x2 MIMO technology to the outdoor wireless network. GNS Wireless also stocks a wide variety of single radio access points to enable a single integrated deployment that supports all combinations of bands, modes, clients, and applications, without compromising performance. Most outdoor wireless networks will require multiple access points for maximum coverage.