

802.11AC - The Next Generation Wi-Fi Standard



Because of the extremely fast growth in the number and type of Wi-Fi devices paired with the increasing demand for bandwidth has created the need for better wireless performance with greater reach. Campground owners, RV Parks, Marinas, and other outdoor venues looking to upgrade their wireless network can now take full advantage of 802.11AC wireless networks.

What is 802.11AC? 802.11AC is the next and newest generation Wi-Fi standard. 802.11AC wireless networks are designed to meet these needs of growing wireless networks, whether they be indoor wireless networks, or long range outdoor wireless networks. GNS Wireless supports and installs all varieties of long range, throughput intensive wireless networks.

How does it work? By providing wider frequency bands, 802.11AC doubles the capacity of traffic that can be processed; multiple antennas increase the reach and the quality of reception at further distances, and faster processing power provides up to triple the speeds (up to 1,300 Mbps) that were not possible with previous standards. This not only provides a more reliable wireless network, but also allow us to pair 802.11AC antennas and create high throughput, highly reliable point to point wireless network bridges for extending internet between multiple buildings.

Key Advantages of 802.11AC - Using the 5GHz Band

- Gigabit speed wireless with approximately three times the performance of 802.11N
- Better performance at any range with fewer dead spots, or dead zones
- More reliable connections for media streaming using beam-forming technology
- More Wi-Fi bandwidth on your mobile iPad, Android, Tablet, cell phone etc.
- Only utilizes the 5 GHz Band, which is less prone to interference
- Backward compatible with 802.11A and 802.11N standards, which also use the 5 GHz band

Dual Polarization Directional and Omni Directional Antennas

- Can operate in vertical as well as horizontal polarization
- Are suitable for 802.11N devices to enable multi-thread /MIMO communication
- Enable the access point, or antenna bridge to transmit data on one polarization and receive data on the other simultaneously which increases speed and throughput
- Multi-thread communication can be achieved with the use of one Dual Polarity antennas
- In a point to point, or point to multi point system, the wireless network must be MIMO compliant for this to work. GNS Wireless stocks outdoor wireless bridge antennas, with integrated MIMO antennas for custom point to point wireless solutions.

Please note: In order for maximum performance using the 802.11AC & MIMO Radios, Dual Polarity Antennas must be used. In most cases this means a 2x2 MIMO antenna, but in some or most instances, you will require a 3x3 MIMO antenna. GNS Wireless stocks all 2x2 MIMO antennas, as well as brand new to market 3x3 MIMO, high gain antennas. Please visit <http://www.gnswireless.com> for more information or call (877) 209-5152 and our support and sales department can answer any questions you may have.