



Newport Utilities Connect... turns to Alpha Wireless to boost their fixed wireless and rural broadband capabilities

Executive Summary

Newport Utilities Connect approached Alpha Wireless in search of antenna solutions to boost their fixed wireless and rural broadband capabilities. Providing broadband to sparsely populated areas can be very expensive, especially fiberoptic services - Alpha Wireless selected antenna solutions to fit Newport Utilities Connect exact network requirements, which were reliable and cost-effective.

Newport Utilities Connect

Newport Utilities Connect is an end to end power, water, wastewater and now broadband utility company servicing Cocke County Tennessee and additional areas to the west in Sevier County. Their broadband services started out with a fiberoptic backbone with fiber to the home in densely populated geographical areas.

Challenge

Newport Utilities Connect were looking for a cost-effective way to expand their broadband services by providing access to non and underserved geographical areas where population numbers were not as high. Providing broadband to sparsely populated areas can be very expensive, especially fiberoptic services. All broadband operators have the same challenge in bringing quality broadband services to rural areas with lower populations at a profitable business margin.

"Alpha Wireless were a trusted referral. They were selected based on their high-level of expertise and willingness to collaborate to solve our technical challenges. I felt confident in Alpha Wireless' experience in 3.5 GHz - they have the largest selection of CBRS antenna portfolios I have seen available in North America. The choice was easy", said Chris Calhoun, Vice President of Technology and Customer Experience at Newport Utilities.

Solution

"Our approach to solving Newport Utilities Connect' challenges were to fully understand their expectations, coverage issues, timing, and cost. It was based on a collaborative effort; with both sides working closely. Our technical advisors and RF engineers came up with antennas that suited their precise network design requirements.", says Tim Sill, Vice President Technology, Alpha Wireless.



alphawireless.com

Alpha Wireless, an Irish company designs and manufactures high performance antenna solutions.

Mobile and fixed wireless service providers face a daunting task of satisfying growing demand for coverage and capacity while minimizing the cost to serve. The old models of network deployment are no longer sustainable, and Alpha Wireless is addressing this by ...changing the way wireless networks are built.

We are proud to be known as an innovator within the industry, striving to not only understand the technical challenges our customers face, but also their business challenges. Alpha Wireless has offices in Europe and US. ISO 9001 accredited.

The solutions included omni and directional coverage antennas, outlined below.



Small Cell, AW3089
This omni directional antenna was used for coverage in lower capacity general locations.



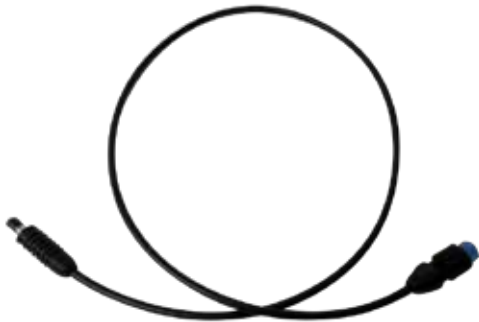
Panel, AW3014
This 65° panel antenna was used for directional coverage.



Panel, AW3056
This 45° panel antenna was used for higher capacity, narrow coverage.

Along with these solutions, the client elected to use the newly introduced 1/4", low loss super flex jumper cables with built-in weatherproofing boots.

1/4" Jumper, 2m, 4.3/10 male to Nex10 male. (0 - 4.5GHz)



The time to execute design and build requirements was short – less than 90 days. In terms of implementation, a four-month plan was put in place to roll out a combined macro massive MIMO and small cell network deployment to cover approximately 6,000 people. There were minimal jurisdictional requirements in this case, which kept the roll out time minimal.

Results

The network is currently being deployed. The installation of antenna options has gone extremely smooth - initial testing have verified that the selection of antennas has performed as designed.

"I feel Alpha Wireless' trusted technical expertise helped Newport Utilities Connect make confident decisions quickly about their network requirements. Our antenna solutions offered the best coverage at the most affordable business economics resulting in lower operational costs - products are also backed by a multi-year warrant", Sill said.

"Alpha Wireless presented innovative solutions that enhanced our network capacity, coverage and reliability. We were impressed by the antenna selection, prices, and flexibility of Alpha Wireless to solve our precise network requirements. Also, their proven rapid response meant the antennas were delivered quickly and on time to fulfil our network build plans", Calhoun said.