

## Stealth Broadband Connects Rural Communities By Leveraging Mimosa by Airspan's Solutions and Streakwave's Distribution Support

### Overview

Stealth Broadband is a telecom company serving rural communities and equipping them with high-speed connections at reasonable prices.

### Requirements

Stealth Broadband needed highly-reliable and ultra-scalable fiber optic and a point-to-multipoint wireless solution. They wanted a partner whose products would meet the quality standards, as well as serve typically underserved communities while keeping costs low.

### Solution

Mimosa's innovative portfolio, including the A5-360, A5c, B11, B24, C5, C5x solutions, were used for point-to-multipoint and backhaul.

### Results

Mimosa and Streakwave Wireless Inc. helped Stealth Broadband provide ultra-fast internet to communities without needing to bury fiber to each household and substantially reduced the deployment time to market to days/weeks down from months/years. This solution allows those living in the most rural parts of the United States the ability to thrive by staying connected to each other.

[stealthbroadband.com](http://stealthbroadband.com)



For rural communities, strong, reliable internet connections keep businesses and residents in communication with the outside world. Stealth Broadband's mission is to broaden those connections to reach underserved rural communities.

Stealth Broadband is a young, privately-funded broadband company founded by telecommunications professionals. In 2016, the company unveiled its fiber-backed wireless technologies in the rural communities of Northeast Nebraska. Since that time, Stealth Broadband has expanded its reach, all while keeping costs at an affordable level for those who need their services to stay connected.

With a growing network, Stealth Broadband needed a partner that would bring old telecommunications infrastructures into the modern era. Stealth Broadband also wanted to provide ultra-fast solutions and scalable opportunities to communities that are often underserved.

Stealth Broadband chose a combination of fiber optics and point-to-multipoint wireless technologies that transformed the accessibility for these rural communities. The variety of products selected included the A5-360, A5c, B11, B24, C5, and C5x. By using Streakwave as a distribution partner, Stealth Broadband could establish a point-to-multipoint and backhaul solution with the peace of mind that they could reach out to Streakwave for top-tier customer service and tech support.



The A5-360 and A5c expanded the infrastructure with innovative antenna design that helps boost throughput and extend the range of MicroPoP deployments, with the A5c links averaging a span of 5 miles. Mimosa's 5 GHz, unlicensed, access point radios delivered fiber-speeds of up to 500/50 Mbps without the need of daisy-chaining. The B11 backhaul radio helped Stealth Broadband dynamically adapt to bandwidth requirements at the lowest cost per Mbps in the industry. The longest B11 link came in at 26 miles. The B24 equipped Stealth Broadband with the industry's price performance leader in unlicensed 24 GHz backhaul. Incredible performance at a low cost meant Stealth Broadband could continue to make good on its promise to consumers of affordable services. By selecting the C5x, Stealth Broadband was able to reliably and effectively provide subscribers with high-speed connectivity to their homes, while keeping costs down.

The products came with an added (albeit unexpected) benefit for the communities receiving the installations—lighting!

"Mimosa products allowed us to provide ultra-fast internet to communities without having to bury fiber to each household. Instead, we are able to bring fiber to a nearby utility pole, often times replacing that pole or adding a pole with a streetlight for the community, which adds visibility to otherwise non-lit intersections," explained James Urwiller, Stealth Broadband's Network Architect.

Stealth Broadband found that despite similar products being on the market, competitors were stuck in 802.11n technology rather than 802.11ac solutions. Mimosa outperformed competitor solutions in both performance and reliability.

When asked about the project, Urwiller said "Today, we have not found a better solution than what Mimosa has to offer. Without Mimosa, our business model wouldn't work as cleanly in our MicroPoP-designed communities."

Currently, Stealth Broadband hopes to roll out more fixed wireless solutions to more small businesses and residents to give them access to exceptionally high speeds with no data caps—all while keeping prices reasonable. Stealth Broadband is also looking forward to future-proofing its network with the new wireless standard, 802.11ax, when Mimosa's Wi-Fi 6E point-to-multipoint access point (A6) and client radio (C6x) become generally available in 2022.

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Mimosa, a division of Airspan, is the global technology leader in wireless broadband solutions, enabling service providers to connect dense, urban and hard-to-reach rural homes at a fraction of the cost of fiber. Mimosa was acquired in 2018 by Airspan, the leading vendor of 4G/5G cells and backhaul technologies.