

Cambium Networks™

CASE STUDY

NetPoint Expands Coverage for Long-Distance Wireless Access

Customer Overview

NetPoint, a pioneer in the wireless ISP (WISP) industry, is dedicated to closing the digital divide by expanding high-quality internet access to underserved and rural areas. With a strong focus on deploying innovative technologies, NetPoint has embraced cutting-edge solutions like Wi-Fi 6E to enhance connectivity for its customers. To maintain its leadership in long-distance wireless deployments, NetPoint partners with Cambium Networks to integrate advanced wireless technologies, providing reliable, high-capacity internet access over long distances.

Business Challenge

As demand for high-speed internet continues to rise, especially in rural areas, NetPoint faced significant challenges in delivering consistent, high-capacity broadband over long distances. Traditional methods, such as laying fiber, were cost-prohibitive and impractical in many cases due to the vast areas that needed coverage. Additionally, maintaining low latency for applications such as video streaming, online gaming, and remote work was critical. NetPoint required a solution that could provide high capacity, long-distance wireless access without compromising on performance or cost-efficiency. NetPoint

Your Internet speed is
Gbps



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Technology Solution

To address these challenges, NetPoint collaborated with Cambium Networks to deploy a cutting-edge wireless solution capable of delivering high-speed broadband over large distances. The deployment featured:

- Cambium Networks ePMP 4000 Series: Operating in the 5 GHz band, this equipment provided the foundation for high-capacity, long-distance wireless backhaul.
- Cambium Networks Force 4600C Radios: Designed for last-mile connectivity, these radios operate in the 6 GHz band, allowing NetPoint to extend coverage up to 70 miles—a significant improvement over the originally designed 50-mile range.
- NetPoint Antennas: Operating in the 5.9 to 7.2 GHz band, these antennas allowed for a very low VSWR, extending the range and improving signal quality over distances of up to 60 miles.

By integrating these technologies, NetPoint could deploy high-capacity wireless links over vast distances, offering an affordable alternative to fiber deployment.

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		R	Registered Subscriber Modules		Show Details						
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Field Results

The combined solution of Cambium Networks radios and NetPoint antennas exceeded expectations during field tests in the spring of 2023. Notable results included:

- Extended Range: Cambium's Force 4600c radios achieved a remarkable range of 70 miles—20 miles beyond the intended capacity-while maintaining reliable performance.
- High-Capacity Connectivity: The wireless solution successfully delivered speeds of up to 1 Gbps over long distances, ensuring sufficient bandwidth for high-demand applications.
- Low Latency: Despite the extended range, the solution maintained low latency, a key requirement for WISPs like NetPoint.
- Deployment Success: Over 2,000 deployments have been completed globally, demonstrating the scalability and reliability of the solution.



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"The Cambium Networks Force 4600c radios paired with our antennas have allowed us to deliver reliable, high-speed internet over distances we hadn't thought possible," said a spokesperson from NetPoint. "The ability to reach 70 miles with such low latency is a game-changer for our rural customers."

Business Value

By deploying Cambium Networks' technology, NetPoint has successfully reduced the need for expensive fiber installations, allowing them to expand coverage more cost-effectively. The solution provided the following key benefits:

- Increased Coverage: The extended range of the Cambium and NetPoint solution enables NetPoint to reach more customers in rural and hard-to-access areas.
- Cost Savings: By avoiding fiber deployments, NetPoint has realized significant cost savings while still delivering highcapacity, reliable broadband to its customers.
- Improved ROI: The affordability and performance of the solution have contributed to a high return on investment, allowing NetPoint to continue expanding its network without sacrificing profitability.
- Customer Satisfaction: By providing fast, reliable internet over long distances, NetPoint has significantly improved the customer experience, especially in remote areas where connectivity options are limited.

"The combination of Cambium Networks technology and our

antennas has revolutionized our service offerings. We can now cover vast areas with minimal infrastructure, keeping costs down while improving the quality of service for our customers," said the NetPoint team.



About Cambium Networks

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences, and device connectivity, with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.

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