

# Collocated ePMP and PMP 450 Solution Gives a Connectivity Boost to a Prospering Canadian Region



## Situation

Southwestern Ontario is a sub-region of the Canadian province of Ontario. Prosperous agriculture, auto manufacturing and hi-tech industries are the key components of the local economy. The region also provides important transportation routes linking Canada with major markets in the Eastern and Midwestern United States. Densely populated, the area represents about a quarter of Ontario's inhabitants. Being reliably connected is essential for this economy in order to sustain the current growth rate and expand moving into the future.

Silo Wireless provides broadband Internet connectivity to growing rural and commercial marketplaces in Southwestern Ontario, Canada. Being a long-time Cambium Networks customer, the company has invested heavily in Cambium's 3.65 GHz band solutions that facilitate broadband connectivity in many growing rural communities. With Silo Wireless' success and rapid expansion in its service areas, many of the deployed access points became congested due to available spectrum limitations. Silo Wireless needed a new effective solution that would allow them to keep adding new residential subscribers and expand its reach to business enterprises, while preserving the quality offered to its existing customer base.



## MAIN FEATURES

- 5 GHz unlicensed frequency
- Cambium Networks' GPS synchronization technology
- All outdoor equipment
- Wireless Manager for easy network configuration

## Solution

Silo Wireless had freed up the majority of its 5GHz spectrum due to a recent upgrade to a licensed microwave backhaul. Consequently, using the 5GHz spectrum for its access network became a natural progression. Among several tested technologies, Cambium Networks offered the best long-term solution in terms of reliability and capacity to satisfy all types of customer needs. The PMP 450 solution was strategically selected for large commercial towers which have limited space and availability. This allowed them to provide connectivity in highly congested business and residential areas. The new ePMP solution was placed at the edge of the network, accommodating rural hard-to-reach areas that needed speedy and cost-effective deployments. Both products complement each other by focusing on specific areas.



## Results/Customer Benefits

Silo Wireless was able to deploy the ePMP and PMP 450 products easily, utilizing existing equipment modules which currently provides power and timing to other Cambium platforms. The configuration of access points was quick and seamless with Cambium Networks' Wireless Manager – a comprehensive tool that manages the network.

The newly introduced ePMP product in combination with the field-proven PMP 450 has offered Silo Wireless an opportunity to utilize the 5GHz spectrum both efficiently and economically to extend their network reach. The innovative wireless provider has been able to migrate the majority of customers to the new ePMP/PMP 450 integrated solution and confidently offer even faster internet packages, while increasing its ROI. Major rollout plans are on the way to replace existing technologies with the PMP 450 in key city centers and ePMP in rural areas, expand market share with business enterprises and deliver the Internet in a compelling way providing more capacity at less cost.



### PMP 450:

- Large service area, up to 200 subscribers per access point, satisfies the density of business customers per tower
- Long deployment range, up to 25 miles (40 km), offers ability to reach more subscribers from one tower
- No channel guards support a high concentration of business customers while utilizing less spectrum
- Downlink/Uplink Ratio Adjustment (50% D/50% U ratio) offers the flexibility to create symmetric communication for the needs of corporate customers – primarily VPN and VoIP services

### ePMP:

- QoS allows a provider to confidently offer VoIP to the majority of residents (90%)
- Downlink/Uplink Ratio Adjustment (75% D/25% U ratio) satisfies the needs of residential rural customers to provide adequate streaming capabilities more than 60% of the time
- Consistent capacities of over 80 Mbps downlink and 25 Mbps uplink satisfy the needs of video streamers
- Up to 120 subscribers per access point allows for sparse residential

“The combined PMP 450/ePMP solution is allowing us to confidently provide next generation access to our subscriber base at a very economical price with the quality and reliability we have come to expect from the Cambium Networks product line,” said **ANDREAS WIATOWSKI, DIRECTOR / CEO, SILO WIRELESS INC.** “The ePMP solution has been the product we have been waiting for. It was superior to other technologies, offered a better ROI on CAPEX and gave us a way to precisely target the needs of the rural regions we service.”