

High Speed Point to Point Backbone

Wireless Internet Service Provider



▲ *LibraPlus 5845 Extended Range (ER) with external parabolic antenna.*

“The LibraPlus 5845 bridges have proved their superiority over any other product to deliver the required results in challenging RF conditions”

Santhosh Samuel,
*Business Development
Hutton Communications, Canada*

CUSTOMER

Established in 1997, Reztel provides high speed internet services to residential and corporate customers in Eastern Ontario, an area 200 km east of Toronto.

Hutton Communications Inc. established in 1967, is a leading distributor of wireless communications products including site infrastructure, broadband and related networking components. Hutton provides products and services from leading wireless manufacturers to wireless carriers, tower contractors, Value Added Resellers and government agencies through a network of strategic warehouses located throughout North America.

CHALLENGES

As an independent wireless internet service provider, Reztel faces two major challenges with its infrastructure; increasing subscriber growth and bandwidth hungry users. With 68% of its population online, Canada has one of the highest internet adoption rates in the world. Not only are there a lot of users, but these users are demanding more and more bandwidth from internet services as they engage in activities like music and movie downloading, surfing the web, and online video games. These factors boil down to an increased demand for resources on Reztel’s backbone network.

To ease the strain on the network, Reztel’s engineers determined that a high-speed backhaul link was required between the city of Trenton (population 20,000) and a data centre located in Belleville (population 50,000).



SOLUTION

Reztel examined several alternatives to solve their backbone requirements such as leasing a dedicated line from the incumbent telecom operator, a fixed wireless system using licensed-band equipment, and radio equipment operating in the unlicensed band.

The leased line option presented the highest reliability of the three options, but also the highest cost. Using a leased line, Reztel would be incurring a large unrecoverable monthly expenditure to the incumbent telecom operator – who is also their main competitor.

To begin using high power licensed-band equipment, Reztel would need to purchase an expensive license to operate in a regulated frequency spectrum, and this does not even include the cost of the radio equipment or antennas. This option proved too costly for an independent operator like Reztel.

Reztel found the right mix of price and performance in the LibraPlus 5845 from EION Wireless. The LibraPlus is a broadband wireless Point-to-Point and Point-to-Multipoint radio that operates in the 5.x GHz frequency band. The 5.x GHz band is unlicensed in North America.

The Point-to-Point variant of the LibraPlus is available in a Rapid Deployment (RD) model with an integrated 23 dBi antenna for simple installations at distances under ten kilometers, and an Extended Range (ER) model that connects to an external antenna for longer links.

The 16.3 km link distance needed by Reztel required the use of a pair of LibraPlus ER radios with external parabolic antennas at each end of the link.

After a quick site survey, Reztel engineers had the LibraPlus radios installed and communicating in less than a day. Each radio is packaged with a mounting kit that can attach to a wall, tower or pipe, and the LibraPlus comes with a built-in suite of software tools that aid antenna alignment.

CONCLUSION

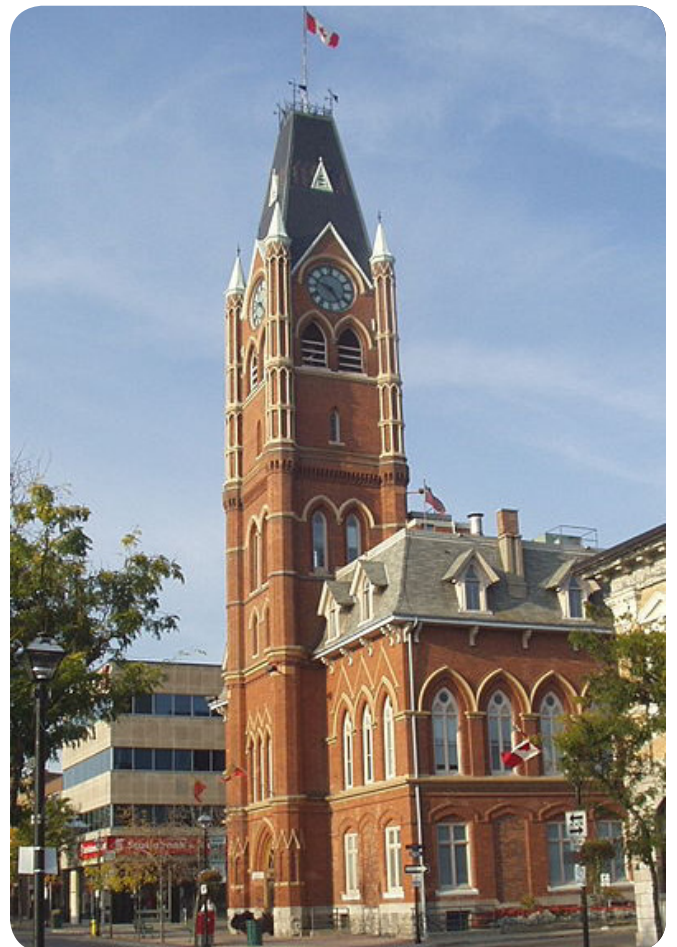
Overall, Reztel was very pleased with the LibraPlus. On average the 16 km link achieves a throughput of 48 Mbps which is more than adequate to handle the required traffic load. Best of all, there are no recurring costs for Reztel to regulators or competing telcos.

“This was a difficult link with a high noise floor and the LibraPlus was able to astonish me in all of aspects of operation, including ease of deployment, performance and stability. This EION stuff is great.”

Reztel Field Service Manager



Ontario, Canada



Belleville, Ontario has a population of 50,000.



www.eionwireless.com

Corporate Headquarters
320 March Road, Suite 500
Ottawa, ON, K2K 2E3
Canada
Phone: +1 (613) 271-4400
Fax: +1 (613) 271-7040

EION Wireless, a division of EION Inc., is a global provider of Broadband Wireless Access products that enable effective, economic and secure wireless high-speed communications solutions. EION is a Principal Member of the WIMAX Forum and was named one of the fastest fifty growing wireless companies in North America by Deloitte and Touche. With over ten thousand broadband wireless installations worldwide, the company's licensed and unlicensed frequency products are used by wireless ISPs, private network operators, and remote rural networks and in voice and data backhaul applications to solve last mile challenges. EION Wireless works with more than 165 worldwide channel partners to support its diverse global customer base.