

A background image of a city skyline at night, with tall buildings and bright lights, creating a sense of modern technology and connectivity.

# Improving Connectivity for Businesses in the Niagara Region

## NRBN Success Story

*“PacketLight’s alien wavelength technology allows us to upgrade our existing network by ten times the capacity of our legacy infrastructure.”*

*- Mark Kuhlmann, Manager of Field Operations, NRBN*

## AT A GLANCE

**Company:** NRBN

**Location:** Canada

**Industry:** Data and voice solutions

### **Challenge:**

The challenge was to increase NRBN's network capacity from 10G to 100G without changing existing infrastructure.

### **Solution:**

PacketLight implemented its alien wavelength solution, deploying the 200G muxponder/transponder and 10G DWDM transponder, and providing NRBN with a cost-effective solution.

### **Success:**

PacketLight's agile, compact and flexible products answered NRBN's need to cost-effectively increase network capacity by nearly ten-fold, and optimize data and speed across existing infrastructure to support data demands and data transport

## Background

Niagara Regional Broadband Network Limited (NRBN) is the premier choice for data communications services in the Niagara Region. NRBN operates an extensive and advanced fiber-optic network, which spans over 600 customer sites and 750 kilometers within the region. NRBN offers a fully redundant and physically diverse IP backbone, making it ideal for disaster-recovery and business-continuity planning.

## The Challenge

NRBN was challenged to increase an existing 10G backbone by building a 4GbE MPLS high capacity, high-speed network that will support all municipalities, universities, schools, hospitals and businesses in the Niagara region.

## The Solution

NRBN adopted PacketLight's alien wavelength solution and deployed the PL-2000AD 200G muxponder/transponder, the PL-1000TN 10G DWDM transponder, and PL-300 passive optical solution. They upgraded their network by nearly ten-fold, keeping up with ever-increasing data demands for the 600+ businesses in the surrounding area.

PacketLight's alien wavelength solution creates more capacity and improved spectral efficiency over fiber lines, and transports additional wavelengths over any existing OTN/DWDM network infrastructure, without infrastructure replacement or change. At a time when network security has become a global concern, PacketLight DWDM and OTN solutions have the most advanced cryptography solution, which performs Layer-1 encryption to ensure that nefarious elements cannot intercepted any data sent across the fiber network.

## Success

“PacketLight’s alien wavelength technology allows us to upgrade our existing network by ten times the capacity of our legacy infrastructure,” stated Mark Kuhlmann, Manager of Field Operations at NRBN.

“Modern day businesses require a broadband connection that will support escalating demand for video, mobile and cloud, and we are committed to meeting these expectations.”

