Doubling Density and Customizing Passive Solutions

Case Study: Reducing Customer Opex by Maximizing CO Equipment Density

Summary

Customer	• Fiber infrastructure provider
Challenges	• Growth projections resulting in critically limited CO space in the near future • A potential costly CO expansion detracting from revenue growth
Solution	• Doubling down on density with a 3RU LGX-based solution
Result	• CWDM mux/demux density increase, extending CO expansion timeline by 8-10 years
Equipment Used	• Integra's custom 16-channel CWDM LGX mux/demux

No Vacancies: Limited Port Density

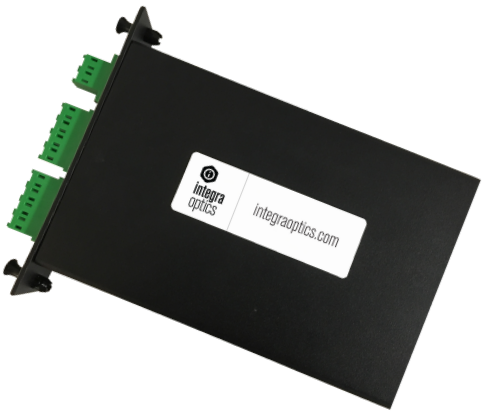
While adding and turning-up new customer links results in additional revenue, it often comes with the challenge of necessary expansion and the associated expense. One of Integra's customers, who provides Internet, Ethernet, Private and Managed IP MPLS network services throughout Canada, was adding active and passive optical equipment to their CO and co-lo space, and quickly running out of room. They came to Integra looking for a solution to meet their growth projections without having to invest in additional CO space.

Our customer's growth projections, in conjunction with the port density provided by the incumbent solution, would have made their available CO space critically limited within six-to-twelve months. Integra's engineering team used their custom and semi-custom design expertise to identify a solution that more than doubles density, adds functionality, and reduces expense.

Doubling Down on Density

With over 4,500 kilometers of fiber deployed in the metropolitan areas of Canada, and a rapidly increasing customer base, our customer needed to expand or quickly identify an alternative and creative solution.

Their current 16-channel CWDM setup was based on a 1RU passive mux/demux, since there was no "off the shelf" solution that met the needs of their fiber infrastructure.



CO expansion would detract from their revenue growth and complicate their network, which had the potential to lead to customer downtime.

As an already trusted partner for our customer's CWDM optical transceivers, Integra saw a passive CWDM challenge and proposed a new solution. Integra developed a 3RU LGX-based solution that would provide more than twice the density (80 fibers per RU versus 32 fibers) of their existing solution.

Hearing that the customer was having to debug during the standard install process, weekly, Integra's team of engineers also proposed additional functionality via mux and demux monitor test points to significantly reduce debugging time during network installs.

"With our ever-growing number of customer links, Fibrenoire needed to find a solution that saved us both time and money immediately and in the long-term. Integra was not only that solution for us, but they also managed to double our density and save us from testing and debugging costs. Their team of engineers went above and beyond to save us CO expansion requirements by up to 10 years."

- Logistics and Provisioning Specialist

Extending Expansion by Years

For an incremental unit cost increase, Integra's solution allowed the customer to double their CWDM mux/demux density and introduced both time and resource savings to test and debug.

The increase in density allowed the customer to push out their CO expansion requirements by an additional 12-18 months in one CO, and by 8-10 years in two others, significantly reducing both their immediate and long-term expense.