

Overview

A Single Source Solution for Broadband Connectivity – 1.25, 2.5, and 10 Gbps DWDM Transport

RCN Metro Optical Network's Wavelength Service is a fully managed, private, point-to-point service delivered over our state-of-the-art dense wave division multiplexing (DWDM) network. RCN Metro's Wavelength Service is ideal for overcoming access and capacity constraints. Our Wavelength Service avoids the problem of initial capital investment, and increased operational and personnel expenses often incurred when deploying dark fiber solutions. Our Wavelength Service also provides a flexible, cost-effective solution to provide the right amount of bandwidth needed to support your mission critical applications.

RCN Metro's Wavelength Service is a "virtual fiber" service, providing transponder-based 1.25, 2.5, and 10 Gbps optical wavelength capacity. The service can be purchased as either an unprotected solution or in a diverse configuration, and is perfect for applications supporting layer two and three data networks. Our Wavelength Service can also provide route diversity or ring closure for layer one SONET networks.

Using Dense Wave Division Multiplexing (DWDM) technology, it involves unique wavelength optical signals that are multiplexed and transmitted over a single fiber. At the receiver end, the composite signal is de-multiplexed and the individual unique signals are recovered. An optical channel consists of two wavelengths to deliver bi-directional communications. Transponders at end locations are connected directly to RCN Metro's DWDM optical layer and provide a non-proprietary, open interface to customer network elements, thereby achieving virtual fiber connectivity between the customer's locations.

Whether capacity is needed within the metro or regionally, RCN Metro's Wavelength Service enables extension of LAN infrastructures for WAN or SAN connectivity. The Wavelength solution provides dedicated bandwidth to guarantee performance when you need it with rates of 1.25, 2.5, and 10 Gbps using DWDM technology. RCN Metro's private, diverse fiber network, along with optional diverse circuit design, provides a solution for business continuity alternatives. Combining the Wavelength service with connectivity between metro areas offers a total solution for businesses with a presence in multiple cities. We monitor our services 24x7 to ensure reliability and responsiveness.

Benefits

- Scalable - Increase capacity as requirements change
- Easy to Deploy - Dark fiber features with the ease of a lit service
- Cost Effective - Bulk point-to-point bandwidth at competitive rates
- Reduces Network Management requirements and resources
- Customizable to meet your business objectives – Protected and unprotected configurations available
- Diverse Routes - Improve customer network reliability and survivability
- Close Your SONET Rings With Clear Channel Capacity
- Supports Multiple Protocols - Seamless support for IP, ATM, frame relay, and circuit switched voice services
- 24x7 Network Surveillance
- Standards-Based - ITU Standards-based DWDM equipment provides multi-vendor interoperability

Additional Services

Ethernet
SONET

Custom Private Optical Network Solutions
NOC Service

Internet Access
Colocation

Technical Specifications

Bandwidth	1.25 Gbps 2.5 Gbps (OC-48) 10 Gbps (OC-192)
Protocol Independent	Open interfaces support all major transport protocols: ATM, SONET, IP, etc.
Optional Route Diversity	Yes
Optional Optical Protection on Diverse Routes	Yes
Availability	Available both within the metro and on the long haul network

Protection Specifications	Point-to-Point	Optically Protected Route Diverse
Availability	99.9%	99.99%
Bit Error Rate	1×10^{-9}	1×10^{-9}
Error Free Seconds	99.9%	99.9%
Mean Time to Repair (MTTR)	8 Hours	4 Hours

About RCN Metro Optical Networks

RCN Metro is a premier provider of high-capacity transport services for carriers as well as large and medium-sized businesses. RCN Metro offers a comprehensive suite of services including: Ethernet, SONET, Wavelength Services, Video Transport, Internet and more. The breadth of our service offering and our ability to combine them to deliver customized, cost-effective, reliable solutions that are implemented and supported by dedicated client teams is what sets RCN Metro apart from the competition and makes us "The Smarter Choice" to the status quo.

With a network leveraging unique rights-of-way, spanning from Maine to Virginia and out to Chicago, RCN Metro deploys custom solutions to service providers as well as companies in the finance, hospitality, media, government, health care and education industries.

RCN Metro is a wholly owned division of RCN Corporation. To learn more about RCN Metro, please visit our website, www.rcnmetro.com.