



WAVELENGTH SOLUTION

Where high capacity meets increasing bandwidth demand

More Than Just Bandwidth

The emergence of Wavelength services is one of the most recent and important phenomena in the development of fiber optic transmission technology. From interconnecting backbones and cloud services, to disaster recovery and data center replication, the need for Wavelength services is on the rise. Using the reliable and redundant, 100% fiber optic core ring architecture built by DQE, Wavelength solutions can increase the capacity of a single fiber to a throughput of 100 Gbps and beyond. This cutting edge technology, when combined with network management systems, enables carriers to adopt optically-based network infrastructures that will meet the next generation of bandwidth demands.

DQE Wavelength Service Advantage

Cost Savings

- Minimizing layers of equipment and fiber builds result in the lowering of operational costs and a simplified network architecture.

Scalability

- Wavelength services minimize the use of dark fiber by maximizing its wavelength capabilities in metro and enterprise networks, enabling businesses to quickly meet their capacity demands.

Enhanced Performance & Reliability

- Low-latency point-to-point connections have the ability to utilize both unprotected and protected paths to meet unique diversity and disaster recovery requirements.

24/7 Network Monitoring

- At DQE, your network can't just perform some of the time; it has to perform all of the time.

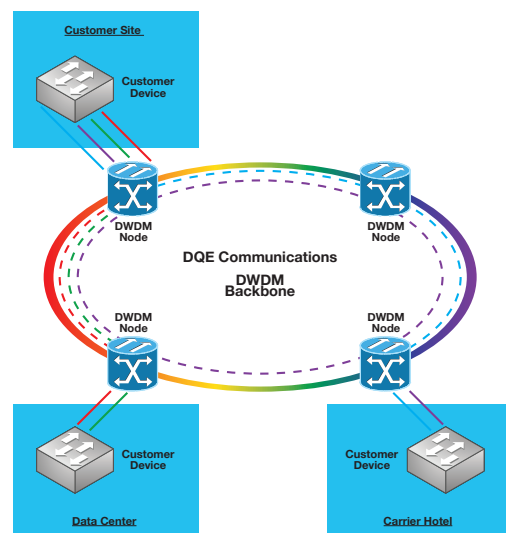
Custom Network Design

- DQE works with you to develop a network customized to your business needs

Wavelength Service: Is It Right For You?

- Available bandwidth speeds:
 - 1 Gbps, 2.5 Gbps, 10 Gbps, 40 Gbps, 100 Gbps
- Supports multiple protocols including:
 - Ethernet, Fibre Channel, FICON, SONET and OTU
- DQE custom designs configurations to provide even higher levels of network protection
- Available low-latency guarantees
- High capacity data center connectivity
- Expanded service reach with higher bandwidth

DQE Communications Wavelength Service SLA		
Configuration	Availability	Intra Metro Latency
Unprotected	99.9%	< 1.5ms
Network Protected	99.99%	< 1.5ms
Network + Access Protected	99.995%	< 1.5ms



DQE WAVELENGTH CREDIT SCHEDULE

The two primary metrics supported via SLA for the DQE Wavelength services are Availability and Intra Metro Latency

Credit Schedule — Availability			
Unavailable per Month (hr:min:sec)	Unprotected	Network Protected	Network + Access Protected
00:02:10 to 00:04:30	N/A	N/A	5%
00:04:31 to 00:30:00	N/A	5%	20%
00:20:01 to 02:00:00	5%	20%	30%
02:00:01 to 05:00:00	20%	30%	50%
05:00:01 to 24:00:00	30%	50%	75%
24:00:01 to 48:00:00	50%	75%	100%
48:00:01 or greater	100%	100%	100%

Availability is defined as the amount of time that a service is available to the Customer.

Credit Schedule — Latency			
Average One-Way Latency in a Month	Unprotected	Network Protected	Network + Access Protected
1.5ms to 10ms	5%	5%	5%
10ms to 15ms	50%	50%	50%
15ms or greater	100%	100%	100%

Intra Metro Latency is defined as the average one-way network delay of the service frames that transit the DQE DWDM network, within a defined DQE metro area, and are delivered via the intended Wavelength service in a calendar month.