CROWN CASTLE

Wavelength

For today's businesses and service providers, bandwidth-intensive applications—including data center backup and recovery and cloud services—are driving a need for wavelengths. Our fully managed, private, point-to-point Wavelength solutions provide dedicated bandwidth to guarantee performance when you need it, delivered over a state-of-the-art Dense Wave Division Multiplexing (DWDM) network. It's a high-capacity solution that relieves bandwidth constraints, improves application performance and scales with your business.

We also offer Managed Private Optical Networks (MPON) that are flexible, custom-designed solutions capable of supporting multiple technologies, protocols and applications across a wide area. With MPON you'll get a turnkey, dedicated private networking solution that's backed by our nationwide footprint, the latest technologies and our experienced support staff.

Key Benefits

Enhanced network security

Layer 1 optical encryption Wavelength solutions are FIPS-certified to provide the highest level of in-flight data security. MPON solutions provide an additional layer of security with private fiber and private DWDM equipment.

Optimized performance and reliability

When designing diverse routes, we provide protected and unprotected options and leverage unique utility rights-of-way to improve network reliability and survivability. Wavelength solutions provide similar features to Dark Fiber but with the ease of a managed service.

Dedicated support and monitoring

Proactive monitoring ensures high availability and reduces network management requirements and resources. And you get the unmatched reliability and peace of mind of our around-the-clock Network Operations Center, so you can spend less time managing your network.

Increased flexibility and scalability

Supports multiple protocols with seamless support for IP, Ethernet, SONET and SAN services and is standards based with DWDM equipment ensuring multi-vendor interoperability. Can be customized with ultra-low and low-latency configurations for real-time applications like video conferencing and financial services transactions.

Features

> Enables the extension of LAN infrastructures for WAN, MAN or SAN connectivity

> Flexible, transparent bandwidth that supports most major protocols

> Protected and unprotected configurations available

> MPON solutions provide all of the benefits of Dark Fiber without the cost

> FIPS-certified Layer 1 optical encryption available

> Dedicated bandwidth at full line rate

> 24/7 network surveillance and monitoring

Technical Specifications

SPECIFICATION	DESCRIPTION
Bandwidth	OTU 1-4 Fiber Channel, 1 GigE, 10 GigE, 40 GigE, 100 GigE, OC-x, 1 Gbps to 100 Gbps
Protocol Independent	Open interfaces support all major transport protocols: Ethernet, IP, SONET, Fiber Channel, SAN, SD/HD-Video
Optional Route Diversity	Implement service on multiple routes to further ensure the highest availability possible
Optional Optical Protection on Diverse Routes	Switch between active and back-up paths to limit the impact of network events
Availability	Available on both metro and long-haul networks
MPON	Fully managed, custom-designed fiber solution with private fiber and dedicated WDM equipment

PROTECTION SPECIFICATION	DESCRIPTION
Bit Error Rate	1×10-9
Mean Time to Repair (MTTR)	4 hours
Availability	Available on both metro and long-haul networks

Note: Specific protection and performance metrics will be determined by your solution design and Service Level Agreement.

Why Crown Castle?

Our unique, nationwide portfolio
With approximately 90,000 route miles of fiber, we own and operate one of the largest and densest fiber networks in the country with a presence in 23 of the top 25 US markets.

Our proven track record
In our 30 years of experience owning and operating network assets we've seen it all and we're always ready to adapt to changing network trends.

Our deep expertise
We've worked with nearly every industry so we understand your unique opportunities and challenges and can tailor solutions to meet your goals.

Our solutions
We have your networking and security needs covered. Visit our infrastructure solutions page to learn more about our suite of solutions and how they can solve your toughest challenges.

CROWN CASTLE

Crown Castle owns, operates and leases more than 40,000 cell towers and approximately 90,000 route miles of fiber supporting small cells and fiber solutions across every major US market. This nationwide portfolio of communications infrastructure connects cities and communities to essential data, technology and wireless service—bringing information, ideas and innovations to the people and businesses that need them.

For more information, please contact 1-833-635-0963 or visit **CrownCastle.com**