CROSSLAKE FIBRE

Metered Dark Fibre Comparison Matrix

You need reliable, high-capacity connectivity that is easily scalable, yet some of the options require a significant capital investment, substantial time to implement or a lengthy lease to get started.

To help you make an informed decision, we've compiled the pros and cons of each network service based on the technical, performance and business specifications you require now and in the future.

TECHNICAL CONSIDERATIONS

	PROs	CONs
Wavelength	• No cost for equipment or maintenance • Carrier provides the protocol and configuration • Network setup, upgrades and maintenance completed by the carrier	• Unable to choose equipment • Upgrades are on provider's schedule
Spectrum	• Requires less equipment than fibre • Carrier manages the end-to-end solution • May purchase any number of channels along the route • Achieve capacities beyond what Wavelength services can provide	• Must purchase and install cross-connects for each band
Private Network	• Fully customizable • Carrier supplies equipment, maintenance and IT support • Directly involved in decision making • Select finance model for equipment and maintenance	• May require buying cross-connects and amplification equipment
Dark Fibre	• Equipment can be swapped as needs change • Manage and operate your own network	• Must purchase and install transponders • Dependent on physical distance of the network and PoPs • Responsible for all maintenance costs and IT support
Metered Dark Fibre	• Use your existing optical equipment vendor • Scalable to unlimited capacity & future-proof with technological advancement • Faster entry into long haul dark fibre service on new & unique route • Completely Non-intrusive regarding Supplier visibility - Edge to edge • Carrier manages & operates the dark fibre network. The customer controls and manages the rest	• Must purchase and install transponders • Dependent on physical distance of the network and PoPs

PERFORMANCE CONSIDERATIONS

	PROs	CONs
Wavelength	• Supports 100G-400G waves	• Unmet business growth through limited service • Shared service with no physical separation on the fibres • Network performance limited by carrier capabilities
Spectrum	• Supports multiple 400G waves • Secure service with guard bands between each channel • Band traffic monitored to prevent stream crossing	• Shared service with finite capacity and throughput available • Network performance dependent on cross-connect equipment
Private Network	• Provides flexibility and agility • Easier to add capacity compared to shared services • The highest level of security • Carrier manages equipment and services	• Network performance limited by carrier capabilities
Dark Fibre	• Download speeds up to 60 TBs per second • Not dependent on carrier for capacity needs • Have total control of scaling with business needs • The highest level of security	
Metered Dark Fibre	• Capacity throughput limited only by their equipment vendors capability • Have total control of adding capacity and scaling with business needs • Only pay for what you need through incremental fibre usage • Monitoring equipment is in a locked and secure cable landing station	

BUSINESS CONSIDERATIONS

	PROs	CONs
Wavelength	• Service is widely available • Commodity networking options make it easier to evaluate costs • Achieve greater margins	• Most expensive service per bit • Less cost-effective to scale networks • Lengthy bureaucratic process for adding capacity
Spectrum	• Pay for cross-connect at either end – carrier provides the rest	• Only available from certain carriers • Cost varies greatly from provider to provider
Private Network		• High OpEx for custom solutions
Dark Fibre		• High upfront OpEx costs • Long-term contracts with pre-determined capacity • Revenue stream may not justify the high upfront costs
Metered Dark Fibre	• No CAPEX (IRU) costs for Dark Fibre • Opex grows as customer revenue grows • Scalable network can become revenue stream as business grows • Utility based invoicing. Scale up or down as needs change • No long term contract commitment on day one	

Learn More

Learn more about Metered Dark Fibre and request a custom KMZ kit at crosslakefibre.ca/metered-dark-fibre.