



CORNING

Decision Matrix

Wavelength Division Multiplexing

Continued user growth and rising bandwidth demand have driven technological and architectural changes across optical networks.

These changes include:

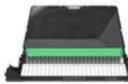






- Passive optical network (PON) evolution from gigabit passive optical network (GPON) to 10 Gb and higher speeds (25G, 50G+)
- Utilization of network convergence and shared fiber networks
- Hybrid fiber-coaxial (HFC) network evolution bringing fiber deep and distributed access architectures with higher node requirements
- Advancements toward densification of 4G/LTE and 5G

If you are a carrier facing constraints in your ability to provide more services or links with your existing fiber resources, wavelength division multiplexing (WDM) may be the answer instead of investing in new fiber construction. Corning's vertical manufacturing integration of passive devices and hardware solutions allows us to provide a WDM solution tailored to your specific needs.

WDM Technology Options

	CWDM	DWDM	FWDM/BWDM (Filter based / band WDM)	CEX PON Coexistence
Max channels (λ)	18 channels 20 nm spacing	(C-band/typical) 80 channels @ 50 GHz 40 channels @100 GHz 20 channels @ 200 GHz	Defined by spectrum in each band	Services: GPON, XGS, NGPON2, 10/25G -EPON, 25GS-PON, 50G PON, RF Video, OTDR
Optical spectrum (band)	O-L	C-L	O-U	O-U
Transport Configurations		1-fiber (COM) MUX or DEMUX 2-fiber (COM) MUX and DEMUX OADM (Optical Add/Drop Multiplexer)		

Hardware capacity and WDM capabilities vary among platforms. In selecting hardware, consider channel and service density, fiber termination type, and the number of devices needed.

Hardware Options	Product Image	Inside Plant (ISP)	Outside Plant (OSP)	Connector or Splice Options
Centrix™ Modules		X	X	SC, LC
LGX Modules		X	X	SC, LC
EDGE™ Modules		X		LC, MDC
1RU/2RU Shelves		X		SC, LC
BPEO (DWDM Closure Trays)			X	SC, LC, 900 μ m fiber, 250u fiber
Fiber Dome (DWDM Closure Trays)			X	SC, LC, 900 μ m fiber, 250u fiber
Evolv® Terminal			X	Pushlok™

For further information, please refer to [Application Engineering Note: Selecting Passive Wavelength Division Multiplexing Hardware – AEN177](#), or contact Customer Care at 1-800-743-2675, CCSAmericas@corning.com.

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