



## Card Guide Module (CGM®)

Card Guide Modules (CGM) are panel-mount WDM devices for high-density applications. These modules are pre-terminated plug and play products in a space efficient design. Using proven thin-film filter technology, Card Guide Modules feature low insertion loss, high isolation and superior environmental stability.

Available with up to 40 DWDM channels, Card Guide Modules can also be configured with optional Express, Upgrade or Test ports.

### Features

- Space efficient design
- Mux/demux options
- LC/UPC or LC/APC adapters
- Up to 40 DWDM channels
- 50/100/200 GHz ITU channel spacing
- Optional Express, Upgrade or Test ports

### Specifications

PARAMETER	UNIT	VALUE		
Channels	ea	8	20	40
CGM Size	Width	Single	Dual	Quad
Center Wavelength	nm	Per ITU-T G.694.1 Grid		
Channel Spacing	GHz	100		
Passband	nm	± 0.11		
Passband @ 0.5 dB	nm	> 14		
Passband Ripple	dB	< 0.5		
Insertion Loss (IL) (Typ.) **	dB	2.6	5.3	6.0
Insertion Loss (IL) (Max.) **	dB	3.2	5.8	6.5
Isolation (Adjacent Channel)	dB	≥ 25		
Isolation (Non-Adjacent Channel)	dB	≥ 40		
Return Loss (RL)	dB	≥ 45		
Directivity	dB	≥ 50		
Polarization Mode Dispersion (PMD)	ps	≤ 0.15		
Polarization Dependent Loss (PDL)	dB	≤ 0.25		
Wavelength Thermal Stability	nm/°C	< 0.001		
Insertion Loss Thermal Stability	dB/°C	< 0.007	< 0.007	< 0.008
Optical Power (Max.)	mW	300		
Options	Port	Express, Upgrade, Tap, Mux/Demux		

\* Optical specifications do not include optional ports

\*\* Includes Connectors

### Temperature Specifications

TEMPERATURE RANGE	
Operating Temperature	-5°C to +70°C
Storage Temperature	-40°C to +85°C