

Course Wavelength Division Multiplexing (CWDM)

CWDM-xxxxxxxR

NEW



Features

- ▶ Increase bandwidth on existing fiber infrastructure
- ▶ Alleviate fiber exhaustion
- ▶ Transmit multiple protocols over an existing duplex fiber link by combining the fiber outputs of multiple media converters
- ▶ Provide scalable bandwidth of up to 20Gbps over existing fiber links
- ▶ "Plug and play," no configuration of CWDM components
- ▶ Use existing standard optical ports on switches and routers
 - Utilize Optical Line Converter as transponder
- ▶ Lifetime Warranty

Accessory (sold separately)

CWDM-MB19R1

19" Rack Mount Bracket, 1RU High, holds 2 CWDM Modules



Ordering Info

Module Type

A	Add/Drop Mux
M	Mux/Demux

Connectors

LC	LC/PC
SC	SC/PC

Channel Configuration (Module Type A Only)

1A451	1 Ch. Add/Drop 1510nm (group 451)
1B451	1 Ch. Add/Drop 1530nm (group 451)
1C451	1 Ch. Add/Drop 1550nm (group 451)
1D451	1 Ch. Add/Drop 1570nm (group 451)
1A453	1 Ch. Add/Drop 1530nm (group 453)
1B453	1 Ch. Add/Drop 1550nm (group 453)
1C453	1 Ch. Add/Drop 1570nm (group 453)
1D453	1 Ch. Add/Drop 1590nm (group 453)
1A455	1 Ch. Add/Drop 1550nm (group 455)
1B455	1 Ch. Add/Drop 1570nm (group 455)
1C455	1 Ch. Add/Drop 1590nm (group 455)
1D455	1 Ch. Add/Drop 1610nm (group 455)
1A847	1 Ch. Add/Drop 1470nm (group 847)
1B847	1 Ch. Add/Drop 1490nm (group 847)
1C847	1 Ch. Add/Drop 1510nm (group 847)
1D847	1 Ch. Add/Drop 1530nm (group 847)
1E847	1 Ch. Add/Drop 1550nm (group 847)
1F847	1 Ch. Add/Drop 1570nm (group 847)
1G847	1 Ch. Add/Drop 1590nm (group 847)
1H847	1 Ch. Add/Drop 1610nm (group 847)

Channel Configuration (Module Type M Only)

451	4 Ch. 1510/1530/1550/1570nm
453	4 Ch. 1530/1550/1570/1590nm
455	4 Ch. 1550/1570/1590/1610nm
551	5 Ch. 1510/1530/1550/1570nm + 1310nm
553	5 Ch. 1530/1550/1570/1590nm + 1310nm
555	5 Ch. 1550/1570/1590/1610nm + 1310nm
847	8 Ch. 1470 ~ 1610nm
947	9 Ch. 1470 ~ 1610nm + 1310nm

** Note: 1310nm channel is wideband (+/- 50nm)*
 Other channel configurations may be available upon request. Please contact Transition Networks.

Examples

CWDM-M455LCR
 CWDM Mux/Demux Module, 4 channel, 1550 nm ~ 1610nm

CWDM-1D847SCR
 CWDM Add/Drop Mux Module, 1 channel drop (1530nm) pass 1470nm ~ 1510nm & pass 1500nm ~ 1610nm

Specifications

4 Channel Mux/Demux Specific Optical Specs	
Operating Wavelength:	1500nm ~ 1620nm
Center Wavelength (λ_c):	1510nm ~ 1610nm
Max Insertion Loss*:	1.7 dB/channel
5 Channel Mux/Demux Specific Optical Specs	
CWDM Operating Wavelength:	1500nm ~ 1620nm
CWDM Center Wavelength (λ_c):	1510nm ~ 1610nm
1310nm Ch. Operating Wavelength:	1260nm ~ 1360nm
1310nm Ch. Center Wavelength (λ_c):	1310nm
CWDM Max. Insertion Loss*:	2.0 dB/channel
1310nm Ch. Max Insertion Loss*:	1.0 dB/channel
1310nm Ch. Port Isolation:	30 dB Min. (@CWDM bands)
8 Channel Mux/Demux Specific Optical Specs	
Operating Wavelength:	1460nm ~ 1620nm
Center Wavelength (λ_c):	1470nm ~ 1610nm
Max Insertion Loss*:	3.0 dB/channel
9 Channel Mux/Demux Specific Optical Specs	
CWDM Operating Wavelength:	1460nm ~ 1620nm
CWDM Center Wavelength (λ_c):	1470nm ~ 1610nm
1310nm Ch. Operating Wavelength:	1260nm ~ 1360nm
1310nm Ch. Center Wavelength (λ_c):	1310nm
CWDM Max. Insertion Loss*:	3.3 dB/channel
1310nm Ch. Max Insertion Loss*:	1.0 dB/channel
1310nm Ch. Port Isolation:	30 dB Min. (@CWDM bands)

* Note: All Insertion Loss values include one connector pair

1 Channel Add/Drop (4 ch. group) Specific Optical Specs	
Operating Wavelength:	1500nm ~ 1620nm
Center Wavelength (λ_c):	1510nm ~ 1610nm
Add/Drop Ch. Max Insertion Loss*:	0.7 dB
Pass Ch. Max Insertion Loss*:	1.0 dB
1 Channel Add/Drop (8 ch. group) Specific Optical Specs	
Operating Wavelength:	1460nm ~ 1620nm
Center Wavelength (λ_c):	1470nm ~ 1610nm
Add/Drop Ch. Max Insertion Loss*:	0.7 dB
Pass Ch. Max Insertion Loss*:	1.0 dB
General Optical Specs (applies to all CWDM configurations)	
CWDM Channel Spacing:	20nm
CWDM Channel Passband:	-5.5nm < λ_c < +7.5nm
Passband Ripple:	0.5 dB max.
Adjacent Channel Isolation:	30 dB min.
Non-adjacent Channel Isolation:	40 dB min.
Directivity:	50 dB min.
Return Loss:	45 dB min.
Polarization Dependent Loss (PDL):	0.2 dB max.
Optical Operating Power:	300 mW max.
Fiber Type	Corning SMF-28
Dimensions	Module Width: 8.3" [212 mm] Depth: 7.6" [192 mm] Height: 1.7" [43 mm]
Environment	0°C to +70°C operating temperature -40°C to +85°C storage temperature
Warranty	Lifetime



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