Wave Division Multiplexers (WDMs)

WDM Module

WDMs are used to combine multiple optical signals onto fibre, expanding on the fibre's ability to carry traffic. Conventional WDM combines 1310 nm and 1550 nm while Course WDM (CWDM) use up to 16 channel. Dense WDM (DWDM) use the 1535 nm - 1565 nm transmission window and typically operate up to 40 channels.

Features

- Plug and Play design
- Optimise fibre utilisation
- Scaleable modular design or 1RU variations
- Customisation also available

Applications

- Telecommunication
- LAN/SAN

1RU WDM

WDM Specifications

Insertion loss* (dB)	0.6
Isolation (dB)	≥ 30
PDL (dB)	≤ 0.1
Operating wavelength (nm)	1310 / 1550
Directivity (dB)	≥ 55
Return loss (dB)	≥ 55

* Insertion loss excludes connectors

Environmental Specifications

Operating temperature (°C)	-20 - +70
Storage temperature (°C)	-40 - +85

CONNECTOR PERFORMANCE				
LC, SC, ST and FC connectors*				
	SINGLEMODE			
	UPC @ 1310 and 1550 nm		APC @ 1310 and 1550 nm	
	Average	Max / Min	Average	Max / Min
Insertion loss (dB)	0.10	0.25 Max	0.15	0.25 Max
Return loss (dB)	58	55 Min	70	65 Min

* Please contact AFL for performance on other connectors

Ordering Information

WDM Module

PART NUMBER	DESCRIPTION
FPD-OMW11315SCASC1-H1	1 x 1310/1550 nm WDM module, SCA/SC
FPD-OMW11315SCASC2-H1	2 x 1310/1550 nm WDM module, SCA/SC
FPD-OMW11315SCASC4-H1	4 x 1310/1550 nm WDM module, SCA/SC

Rackmount

PART NUMBER	DESCRIPTION
FPD-OMW11315SCASC6-X1	6 x 1310/1550 nm WDM, SCA/SC, 1RU

Please contact AFL for alternative configurations

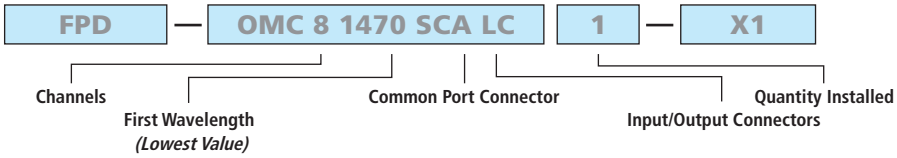
Australia: 1300 232 476 New Zealand: 09 927 7140
www.AFLglobal.com

1RU CWDM

CWDM Specifications

Channels		2	4	8	16	18
Central wavelength		ITU-T Grid				
Passband 0.5 dB passband (nm)		≥ 14				
Channel passband (nm)		+/- 6.5				
Ripple (dB)		≤ 0.5				
Insertion loss (dB)	Typical	1.4	1.6	1.8	4.3	5.1
	Max	1.8	2	2.5	5	5.8
PDL (dB)		≤ 0.10	≤ 0.15	≤ 0.20	≤ 0.25	≤ 0.30
Adjacent channel isolation (dB)		≥ 30				
Non-adjacent channel isolation (dB)		≥ 45				
Return loss (dB)		≥ 45				
Directivity (dB)		≥ 50				
Operating temperature (°C)		-10 ~ +70				

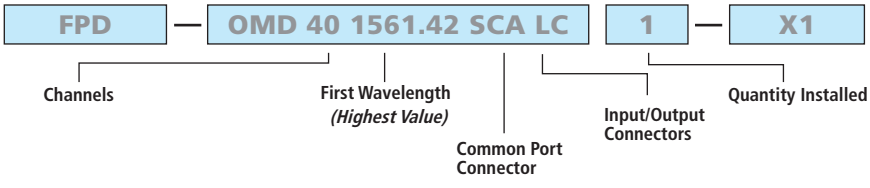
Ordering Information



DWDM Specifications (100GHz)

Channels		2	4	8	16	32	40
Central wavelength		ITU-T Grid					
Passband 0.5 dB passband (nm)		≥ 0.3					
Passband (nm)		+/- 0.11					
Passband flatness (dB)		≤ 0.5					
Insertion loss (dB)	Typical	1.4	1.6	2.6	3.8	4.8	5.2
	Max	1.8	2	3.2	4.5	5.5	6
PDL (dB)		≤ 0.10	≤ 0.15	≤ 0.20	≤ 0.25	≤ 0.30	≤ 0.30
Adjacent channel isolation (dB)		≥ 25					
Non-adjacent channel isolation (dB)		≥ 45					
Return loss (dB)		≥ 45					
Directivity (dB)		≥ 50					
Operating temperature (°C)		-5 ~ +65					

Ordering Information



100GHz Standard Channel Spacing. Please contact AFL for alternative configurations.