

CWDM 1xN mux/demux specifications

Parameters	2 ch. mux/demux	4 ch. mux/demux	8 ch. mux/demux	16 ch. mux/dem
Operating wavelength (nm)	1270~1620	1270~1620	1270~1620	1270~1620
Insertion loss (dB) (P/A grade)	0.7/1.0	1.4/1.7	2.0/2.5	3.5/4.0
Central wavelength (nm)	ITU+1	ITU+1	ITU+1	ITU+1
Channel space (nm)	20	20	20	20
Channel bandwidth (nm)	$\lambda_c \pm 6.5$	$\lambda_c \pm 6.5$	$\lambda_c \pm 6.5$	$\lambda_c \pm 6.5$
Channel flatness (dB)	≤ 0.3	≤ 0.4	≤ 0.5	≤ 0.5
Channel uniformity (dB)	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0
Adjacent channel isolation (dB)	≥ 30	≥ 30	≥ 30	≥ 30
Non-adjacent channel isolation (dB)	≥ 50	≥ 50	≥ 50	≥ 50
Directivity (dB)	≥ 55	≥ 55	≥ 55	≥ 55
Return loss (dB)	≥ 50	≥ 50	≥ 50	≥ 50
Polarization Dependent Loss (dB)	≤ 0.15	≤ 0.15	≤ 0.15	≤ 0.15
Polarization Mode Dispersion (ps)	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1
Wavelength thermal stability (nm/°C)	≤ 0.003	≤ 0.003	≤ 0.003	≤ 0.003
Insertion loss thermal stability (dB/°C)	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005
Power handling (mW)	≤ 500	≤ 500	≤ 500	≤ 500
Operating temperature (°C)	0 ~ +70	0 ~ +70	0 ~ +70	0 ~ +70
Storage temperature (°C)	-40 ~ +85	-40 ~ +85	-40 ~ +85	-40 ~ +85

Ordering information on CWDM systems

SML-X: 1,2,4,5	000-XX: M, D, MD	X:2, 4, 8, 16	X:0, 1	-X	-XX	-XX	-XX	X
1: 19" rack mountable 1U	M: mux	2: 2 channels	0: no 1310nm	M: monitor port	27~61 CWDM starting	U1: expansion port all	SC: SC connector	U: UPC polishing
2: 19" rack mountable 2U	D: demux	4: 4 channels	1: with 1310nm ch.		channel	upper lambdas	LC: LC connector	A: APC polishing
4: 4U card	MD: mux/demux	8: 8 channels				U2: expansion port all		
5: LGX box		16: 16 channels				lower lambdas		
8: no box								

Examples:

SML-1000-MD40-47-U1-SCU : 19" 1U, mux/demux, 4 channels with no 1310nm channel, 1471, 1491, 1511, 1531nm, expansion port for >1531nm, SC/UPC connectors

SML-5000-MD81-M-47-LCU: LGX box, mux/demux, 8 ch. with 1310nm, monitor port, 1471 to 1611nm channels, no expansion, LC/UPC connectors