

## Ultra Low IL Mini Coarse Wavelength Division Multiplexers (CWDMs)

This document proposes the specification of Coarse Wavelength Division Multiplexers and Demultiplexers.

### Specifications

(All parameters are referenced without connectors. Typical connector loss 0.25 dB/pair)

Parameters	Specification	Unit
Center Wavelength	1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611	nm
Channel Passband	$\lambda_c \pm 6.5\text{nm}$	nm
Insertion Loss	$\leq 1.0$ (4-ch) $\leq 1.2$ (8-ch)	dB
Uniformity	$\leq 0.3$	dB
Isolation (adjacent channel)	$\geq 30$	dB
Isolation (non-adjacent channel)	$\geq 50$	dB
Polarization Dependent Loss	$\leq 0.2$	dB
Return Loss (at Mux/DeMux channels)	$\leq 45$	dB
Directivity	$\leq 50$	dB
Maximum Power Handling	300	mW
Operating Temperature	-10 to 70	°C
Storage Temperature	-40 to 85	°C
Package Dimension	70 (L) x 27 (W) x 8 (H)*	mm

## P/N Scheme: CWDMs

C	W	F																
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### Configuration

M=Mux  
D=Demux

### # Channels

01=1-Channel  
04=4-Channel  
08=8-Channel  
16=16-Channel

### Fiber Jacket

A=250 μm bare fiber  
B=900 μm loose tube  
C=3 mm jacket  
D=2 mm jacket  
E=tight buffer

### Fiber Length

10=1.0 m  
15=1.5 m  
30=3.0 m  
mn=m.n meters

### Connectors

0=none    A=FC/PC  
2=FC/UPC    B=SC/SPC  
3=FC/APC    C=SC/PC  
4=SC/UPC    D=ST/SPC  
5=SC/APC    E=ST/PC  
6=ST/UPC    F=LC/SPC  
7=LC/UPC    G=LC/PC  
9=FC/SPC    H=MU/UPC  
I=MU/PC  
J=LC/APC

### Start Channel (Short Wvl)

### End Channel (Long Wvl)

E0=1271	00=1471	E0=1271	00=1471
E1=1291	01=1491	E1=1291	01=1491
E2=1311	02=1511	E2=1311	02=1511
E3=1331	03=1531	E3=1331	03=1531
E4=1351	04=1551	E4=1351	04=1551
E5=1371	05=1571	E5=1371	05=1571
E6=1391	06=1591	E6=1391	06=1591
E7=1411	07=1611	E7=1411	07=1611
E8=1431		E8=1431	
E9=1451		E9=1451	

### Package Type

0= No SS Tube  
S= Single  
N= Module  
G=LGX  
M=Mini