

Coarse Wavelength Division Multiplexer – CWDM

> mux or demux, 8 channels, single mode, ultra low loss



Features

- Device works as a multiplexer, demultiplexer or in a bidirectional single fiber link
- Multiplexer and Demultiplexer paired for lowest link loss
- Micro-hybrid design in a sealed metal housing
- Epoxy free optical path
- RoHS compliant per EU Directive 2002/95EC
- UL 94 V0 flammability rating
- Tested in accordance with Telcordia GR-1209/1221, uncontrolled environment
- Fit for outside plant deployment

Applications

- Combines / separates 8 channels with a 20 nm spacing
- Ultra low insertion loss for long distance applications
- Metro Core, Metro Access, Metro Enterprise, Cable TV, 3G Telephony (UMTS), Datacomm, WAN, RFTS, Sensor Applications
- Analog and digital transmission systems

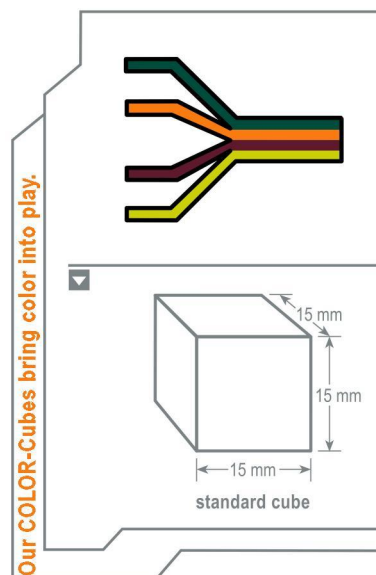
Specifications

Parameters	Coarse Wavelength Division Multiplexer – mux/demux (all values refer to single mode)	
Channels	8	
Center Wavelength [nm]	8 channels in band 1 (red band) 1471 / 1491 / 1511 / 1531 / 1551 / 1571 / 1591 / 1611 other wavelength upon request; please contact CUBO	
Optical Bandwidth	> 13 nm (higher bandwidth on request)	
Insertion Loss *	1.3 dB	
Link Loss * for mux – demux pair	2.6 dB	
Isolation **	adjacent channel	> 30 dB
	non-adjacent channel	> 40 dB
	Isolation Spectral Range Band 1 (red)	1460-1620 nm
	Isolation Spectral Range Band 2 (blue)	1260-1460 nm
Return Loss *	> 45 dB (50 dB typ.)	
Directivity (for mux)	> 50 dB	
Polarization Dependent Loss	< 0.2 dB	
Max. optical power	250 mW	
Operating Temperature	0°C to 70°C (-40°C to 85°C on request)	
Storage Temperature	-40°C to 85°C (when removed from plastic package)	
Package Dimensions	19 x 15.5 x 9 mm ³	

* With passband, valid over full temperature range and at all states of polarization but without connector losses.

** Valid over full temperature range and at all wavelengths across the channel.

Additional components according to your specifications on request! Please contact Cube Optics for further details.



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Ordering Information

Indicate your requirements by selecting one option from each configuration table. Please write the corresponding codes in the available boxes to form your part number. For more information on this or other products and their availability, please contact Cube Optics AG at +49-6131-69851-0 or via e.mail at sales@cubeoptics.com, or visit our website at www.cubeoptics.com.

Ordering example: C-80-M-B-U-S-01-1-B-15

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no. of channels	code	mux or demux code	grade	code	Fiber length	code	Connector in/out* code
8	80	mux M	Standard	S	0.5 m	A	none
9	90	demux D	Premium	P	1.0 m	B	SC/PC
8+bandsplitter 1310	8B		Ultra low loss	U	0.3 m	T	FC/PC
8+bandsplitter (SWP Skip 0)*	8F				0.35 m	U	SC/APC**
8+bandsplitter (LWP Skip 0)*	8G				0.4 m	V	FC/APC**

housing	code	fiber type an packaging	code
Standard 8 channel	S	Coming SMF-28™ (9,125,250 μm) 900 μm loose tube	1
		Coming SMF-28™ (9,125,250 μm) 250 μm coating	2
		Multi mode fiber GI (50,125,250 μm) 900 μm loose tube	3
		Multi mode fiber GI (50,125,250 μm) 250μm coating	4

Center wavelengths [nm]	code
1271 / 1291 / 1311 / 1331 / 1351 / 1371 / _ / _ / 1431 / 1451	A
1471 / 1491 / 1511 / 1531 / 1551 / 1571 / 1591 / 1611	B
1271 / 1291 / 1311 / 1331 / 1351 / 1371 / 1391 / 1411	C
1271 / 1291 / 1311 / 1331 / 1351 / 1371 / _ / 1411 / 1431	D

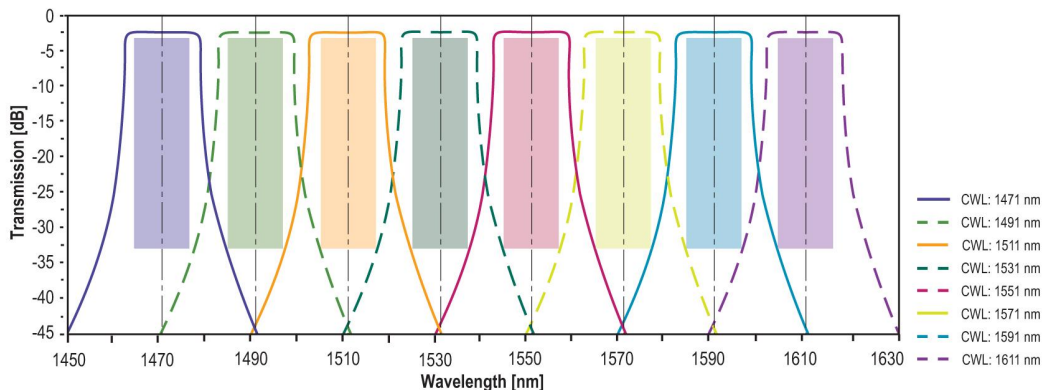
Connector in/out* code	code
LC/PC	5
MU/PC	6
E2000	7
E2000/HRL**	8
ST/PC	9

* no. of skipped ITU channels

connectors only available in combination with loose tube fiber protection
 * device regarded as demultiplexer
 ** 8° angular polishing

Further configuration on request! Please ask for separate datasheets with grey code.

Typical Spectral Performance of 8 Channel Multiplexer



Standard 8 channel housing

