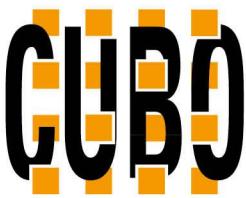


# Coarse Wavelength Division Multiplexer – CWDM

## > mux or demux, 8 channels, single mode



### 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
- Metro Core, Metro Access, Metro Enterprise, Cable TV, 3G Telephony (UMTS), Datacomm, WAN, RFTS, Sensor Applications
- Analog and digital transmission systems

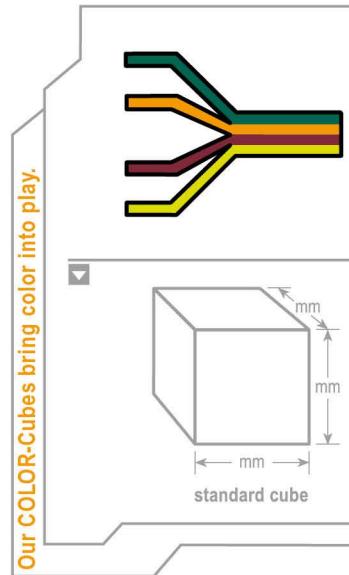
### Specifications

Parameters	Coarse Wavelength Division Multiplexer – mux/demux (all values refer to single mode / multi mode: see separate datasheet)									
Channels	8									
Center Wavelength [nm]	8 out of 10 adjacent channels									
Band 1 (red band)	1471 / 1491 / 1511 / 1531 / 1551 / 1571 / 1591 / 1611									
Band 2 (blue band)	1271 / 1291 / 1311 / 1331 / 1351 / 1371 / 1391 / 1411 / 1431 / 1451 other wavelength upon request: please contact CUBO									
Optical Bandwidth	> 13 nm (higher bandwidth on request)									
Insertion Loss *	Standard < 2.4 dB	Premium < 2.0 dB								
Link Loss * for mux – demux pair	Standard < 4.3 dB	Premium < 3.5 dB								
Isolation **	<table style="margin-left: auto; margin-right: auto;"> <tr> <td>adjacent channel</td> <td>&gt; 30 dB</td> </tr> <tr> <td>non-adjacent channel</td> <td>&gt; 40 dB</td> </tr> <tr> <td>Isolation Spectral Range Band 1 (red)</td> <td>1460-1620 nm</td> </tr> <tr> <td>Isolation Spectral Range Band 2 (blue)</td> <td>1260-1460 nm</td> </tr> </table>		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
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	16 x 15.6 x 9 mm <sup>3</sup>									

\* 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.



All information contained herein is believed to be accurate and is subject to change without notice. No responsibility is assumed for its use. Cube Optics AG, its subsidiaries and affiliates, or manufacturer, reserve the right to make changes without notice, to product design, product components and product manufacturing methods. Some specific combinations of options may not be available. Please contact Cube Optics AG for more information.



## 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.

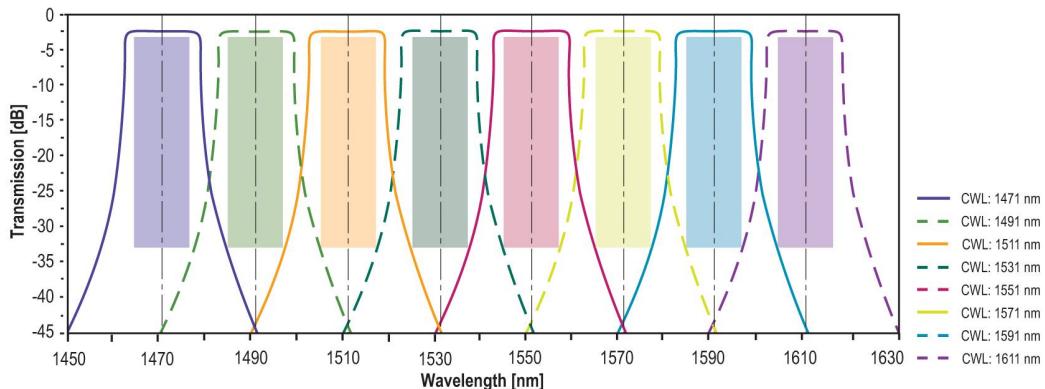
Ordering example: C-80-M-B-S-S-13-1-B-15

C -	<input type="text"/>	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	1	3	-	<input type="text"/>	<input type="text"/>	-	<input type="text"/>	<input type="text"/>
<hr/>																	
no. of channels	code	mux or demux code	grade	code	housing	code	fiber type an packaging										
8	80	mux	M	Standard	S	Standard 8 channel	S	Fiber length	code	Connector in/out	code						
9	90*	demux	D	Premium	P			0.5 m	A	none	0						
<hr/>																	
Center wavelengths [nm]																	
1271 / 1291 / 1311 / 1331 / 1351 / 1371 / _ / _ / 1431 / 1451	code						Coming SMF-28™	(9,125,250 µm) 900 µm loose tube	1								
1471 / 1491 / 1511 / 1531 / 1551 / 1571 / 1591 / 1611	A						Coming SMF-28™	(9,125,250 µm) 250 µm coating	2								
1271 / 1291 / 1311 / 1331 / 1351 / 1371 / 1391 / 1411	B						Multi mode fiber GI	(50,125,250 µm) 900 µm loose tube	3*								
1271 / 1291 / 1311 / 1331 / 1351 / 1371 / _ / 1411 / 1431	C						Multi mode fiber GI	(50,125,250 µm) 250µm coating	4*								
	D						Multi mode fiber GI	(62,5,125,250 µm) 900µm loose tube	5*								
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* Configuration is not reflected by this datasheet.																	
in/out put if the device is regarded as demultiplexer connectors only available in combination with loose tube fiber protection																	
** 8° angular polishing																	

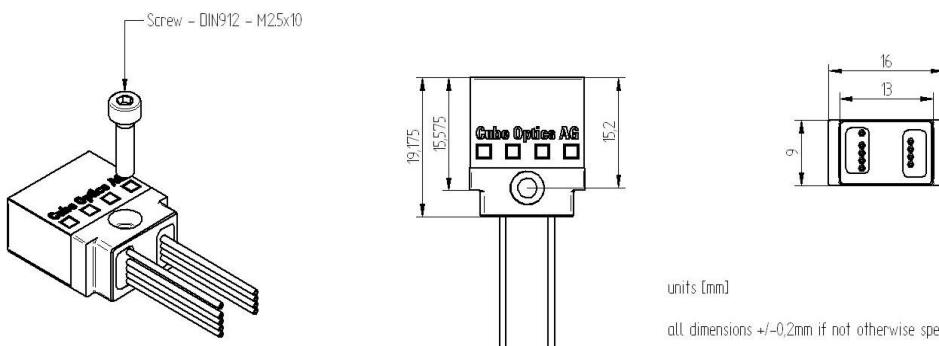
\* Configuration is not reflected by this datasheet.

Further configuration on request!

## Typical Spectral Performance for 8 Channel Mux



## Standard 8 channel housing



units [mm]

all dimensions +/-0.2mm if not otherwise specified

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