

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 **	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	

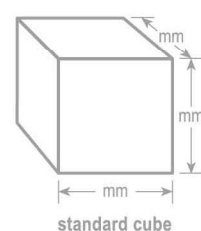
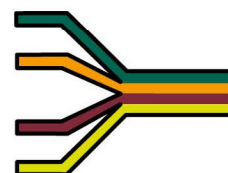
* With passband, valid over full temperature range and at all states of polarization but without connector losses.

** 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.



Our COLOR-Cubes bring color into play.



standard cube

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Cube Optics AG



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-12-1-B-15

C - - - - - - - 1 2 - - -

no. of channels	code	mux or demux code	grade	code	Fiber length	code	Connector in/out	code
8	80	mux	Standard	S	0.5 m	A	none	0
9	90*	demux	Premium	P	1.0 m	B	SC/PC	1
8+bandsplitter 1310	8B*				0.3 m	T	FC/PC	2
8+bandsplitter (SWP Skip 0) ¹	8F*				0.35 m	U	SC/APC**	3
8+bandsplitter (LWP Skip 0) ¹	8G*				0.4 m	V	FC/APC**	4
							LC/PC	5
							MU/PC	6
							E2000	7
							E2000/HRL**	8
							ST/PC	9

Center wavelengths [nm]	code
1271 / 1291 / 1311 / 1331 / 1351 / 1371 / 1391 / 1411 / 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 / 1391 / 1411 / 1431	D

housing	code
Standard 8 channel	S

fiber type and packaging	code
Corning SMF-28™ (9,125,250 µm) 900 µm loose tube	1
Corning 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*
Multi mode fiber GI (62.5,125,250 µm) 900µm loose tube	5*
Multi mode fiber GI (62.5,125,250 µm) 250µm coating	6*

¹ no. of skipped ITU channels

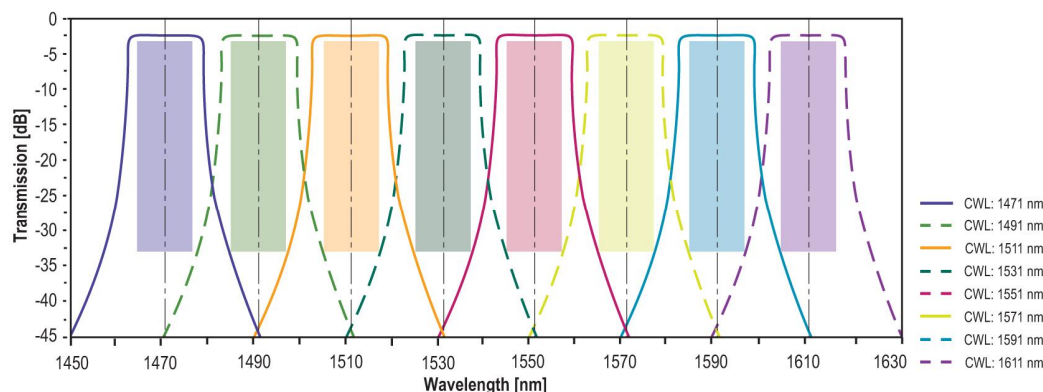
in/out put if the device is regarded as demultiplexer connectors only available in combination with loose tube fiber protection

** 8° angular polishing

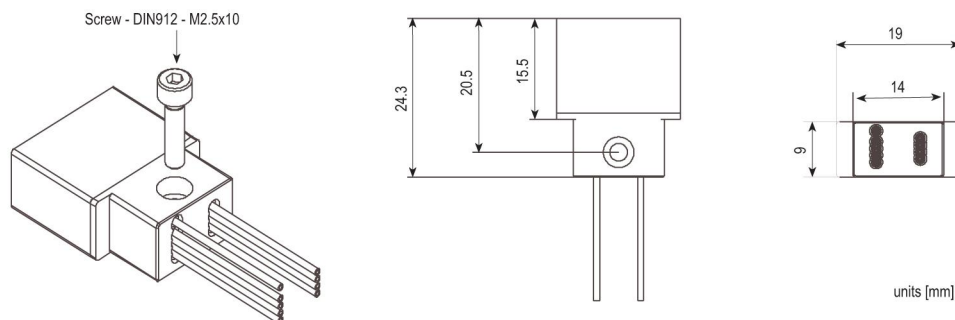
* Configuration is not reflected by this datasheet.

Further configuration on request!

Typical Spectral Performance for 8 Channel Mux



Standard 8 channel housing



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