

Coarse Wavelength Division Multiplexer – CWDM

> mux or demux, 4 channels

Features

- Devices may be used as multiplexer or demultiplexer
- Upgrade channel, integrated bandsplitters and tap ports available
- Micro-hybrid construction in a sealed metal housing
- Epoxy-free optical path
- Extremely small component dimensions: 19 x 15.5 x 9 mm³, other dimensions on request
- Flexible Location of Fiber Ports, for details see Products page
- Also available as integrated Patch Cord CWDM for flexible system configurations to enable multiplexing without using any board space
- Single mode and multi mode fibers possible, fiber packaging: loose tube or 250 μm coating

Applications

- Combines / separates up to 4 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

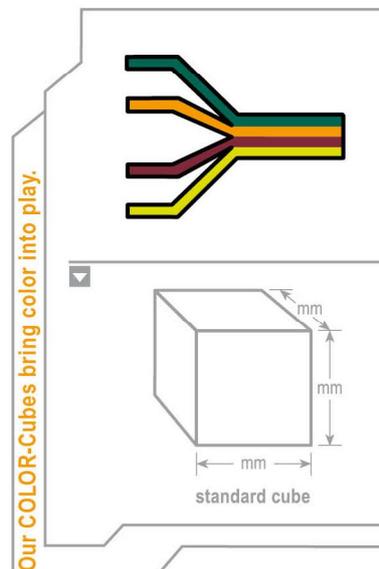
Specifications

Parameters	Coarse Wavelength Division Multiplexer – mux/demux (all values refer to single mode)		
Channels	4, 4+ upgrade		
Center Wavelength [nm]	choice of 4 wavelengths within <u>one</u> band		
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		
	Upgrade: remaining wavelengths of band other wavelength upon request; please contact CUBO		
Optical Bandwidth	> 13 nm (higher bandwidth on request)		
Insertion Loss *	4 channel CWDM	Standard < 1.9 dB	Premium < 1.7 dB
	4+ upgrade channel CWDM	Standard < 2.0 dB	Premium < 1.8 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	> 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-40-A-A-S-S-11-2-B-15

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no. of channels	code	mux or demux code	grade	code	Fiber length	code	Connector in/out	code
4	40	No distinction ¹	Standard	S	0.5 m	A	none	0
4+upgrade	4A	¹ uniform losses, works as mux or demux	Premium	P	1 m	B	SC/PC	1
4+1310	4B*						FC/PC	2
4+exp	4C*						SC/APC**	3
4+exp+1310	4E*						FC/APC**	4
							LC/PC	5
							MU/PC	6
							E2000	7
							E2000/HRL**	8
							ST/PC	9

Center wavelengths [nm]	code
1511 / 1531 / 1551 / 1571	A
1471 / 1491 / 1591 / 1611	B
1271 / 1291 / 1311 / 1331	C
Please, refer to the „40 Gbps CWDM mux or demux, 4 channels, reduced size“ Datasheet	
1351 / 1371 / 1391 / 1411	D
1551 / 1571 / 1591 / 1611	E
1471 / 1491 / 1511 / 1531	F

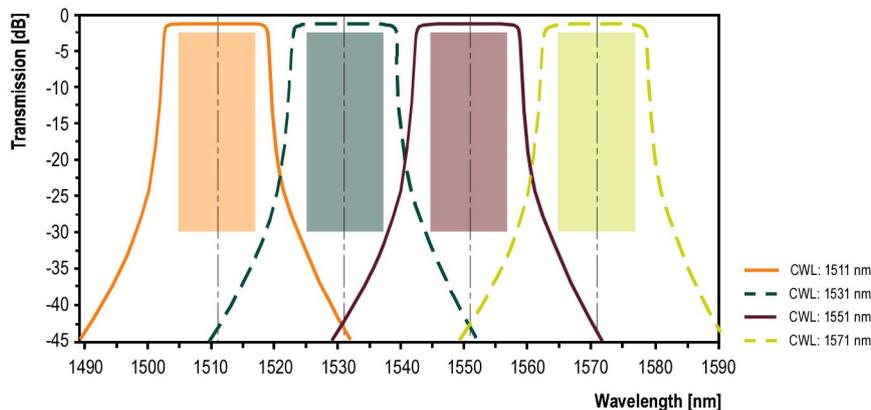
housing	code	fiber type an packaging	code
Standard 4 channel	S	Coming SMF-28™ (9,125,250 μm) 900 μm loose tube	1
		Coming SMF-28™ (9,125,250 μm) 250 μm coating	2
		Multi mode fiber GI (50,125,250 μm) 900 μm loose tube	3*
		Multi mode fiber GI (50,125,250 μm) 250μm coating	4*
		Multi mode fiber GI (62.5,125,250 μm) 900μm loose tube	5*
		Multi mode fiber GI (62.5,125,250 μm) 250μm coating	6*

in/out put if the device is regarded as demultiplexer connectors only available in combination with loose tube fiber protection	code
in/out put if the device is regarded as demultiplexer connectors only available in combination with loose tube fiber protection	** 8° angular polishing

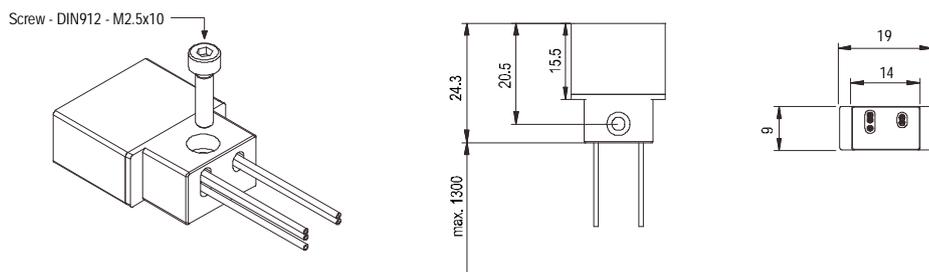
* Configuration is not reflected by this datasheet.

Further configuration on request!

Spectral Performance



Standard 4 channel housing



units [mm]

Corporate Office:
 Cube Optics AG
 Robert-Koch-Strasse 30
 55129 Mainz / Germany

phone: +49-6131-69851-0
 fax: +49-6131-69851-79
 sales@cubeoptics.com
 www.cubeoptics.com