

Coarse Wavelength Division Multiplexer – CWDM mux & demux, 4 channels, mux & demux in one single housing

Features

- 4 channel mux and 4 channel demux integrated in a single housing (separated mux or demux on request)
- Upgrade channel, integrated bandsplitters and tap ports on request
- Micro-hybrid construction in a sealed metal housing
- Epoxy-free optical path, ITU G.694.2 and Telecording GR1221 compliant
- 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
- Packaging on line card or in CWDM sub-system for rack mounting on request

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 channel mux & 4 channel demux	
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	< 1.9 dB (premium versions available)
Link Loss* for mux – demux pair	< 3.8 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 (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 us for further details.

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Ordering Information

Please select an option from each configuration table and write the corresponding codes in the applicable boxes to create the part number.

Ordering example: **CMD-40-A-0-S-12-1-B-15**

CMD - - - - - - 1 2 - - -

no. of channels	code
4	40

optional features	code
none	0

housing	code
Standard 4 channel	S*

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

Fiber length	code
0.5 m	A
1 m	B

Connector in/out	code
none	0
SC/PC	1
FC/PC	2
SC/APC**	3
FC/APC**	4
LC/PC	5
MU/PC	6
E2000	7
E2000/HRL**	8
ST/PC	9

fiber type an 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*

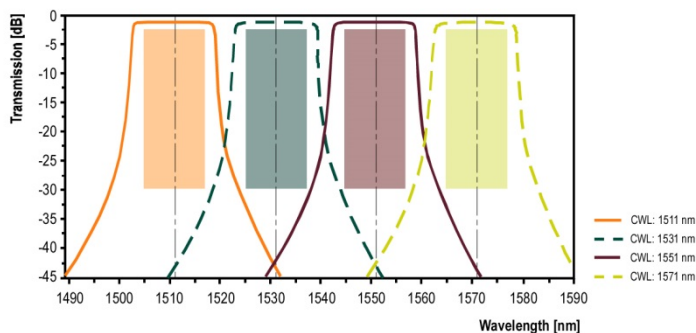
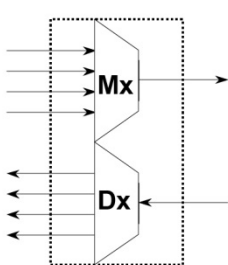
in/out put if the device is regarded as demultiplexer connectors only available in combination with loose tube fiber protection
** 8° angular polishing

* Configuration is not reflected by this datasheet.

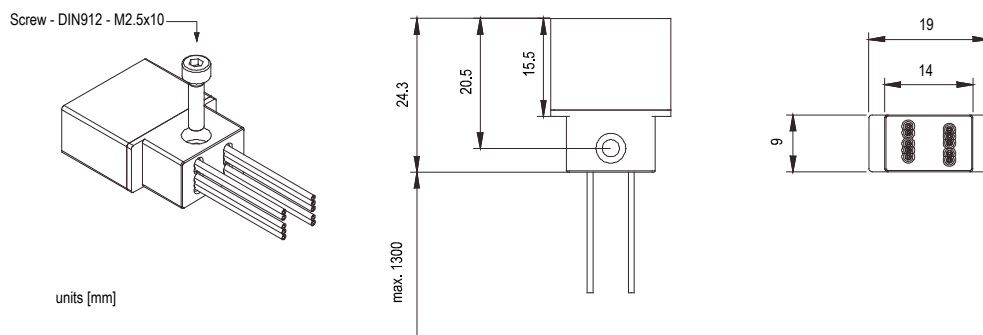
Further configuration on request!

Port Configuration and Spectral Performance

Port Configuration



Standard 4 channel mux & 4 channel demux housing



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