

## 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

<b>Parameters</b>	Coarse Wavelength Division Multiplexer – mux/demux (all values refer to single mode / multi mode: see separate datasheet)	
<b>Channels</b>	8	
<b>Center Wavelength [nm]</b>	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	
<b>Optical Bandwidth</b>	> 13 nm (higher bandwidth on request)	
<b>Insertion Loss *</b>	Standard < 2.4 dB	Premium < 2.0 dB
<b>Link Loss * for mux – demux pair</b>	Standard < 4.3 dB	Premium < 3.5 dB
<b>Isolation **</b>	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
<b>Return Loss *</b>	> 45 dB (50 dB typ.)	
<b>Directivity (for mux)</b>	> 50 dB	
<b>Polarization Dependent Loss</b>	< 0.2 dB	
<b>Max. optical power</b>	250 mW	
<b>Operating Temperature</b>	0°C to 70°C (-40°C to 85°C on request)	
<b>Storage Temperature</b>	-40°C to 85°C (when removed from plastic package)	
<b>Package Dimensions</b>	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.



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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: **C-80-M-B-S-S-13-1-B-15**

C -  -  -  -  -  -  - 1 3 -  -  -  -

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
					0.3 m	T	FC/PC	2
					0.35 m	U	SC/APC**	3
					0.4 m	V	FC/APC**	4
							LC/PC	5
							MU/PC	6
							E2000	7
							E2000/HRL**	8
							ST/PC	9

housing	code	fiber type an packaging	code
Standard 8 channel	S	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*

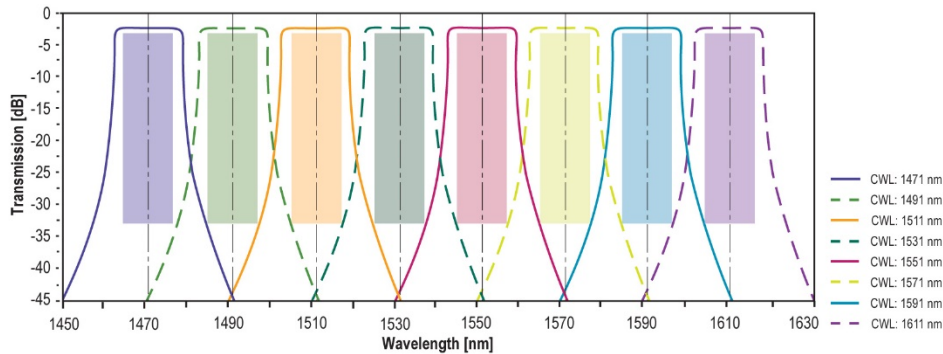
Center wavelengths [nm]	code
1271 / 1291 / 1311 / 1331 / 1351 / 1371 / / / 1431 / 1451	A
1471 / 1491 / 1511 / 1531 / 1551 / 1571 / 1591 / 1611	B
1271 / 1291 / 1311 / 1331 / 1351 / 1371 / 1391 / 1411	C
1271 / 1291 / 1311 / 1331 / 1351 / 1371 / / 1411 / 1431	D

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

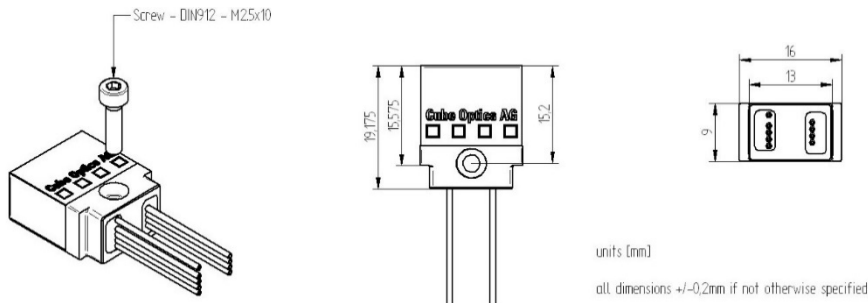
\* Configuration is not reflected by this datasheet.

Further configuration on request!

### Typical Spectral Performance for 8 Channel Mux



### Standard 8 channel housing



HUBER+SUHNER Cube Optics AG  
is certified according to ISO 9001.

#### WAIVER

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.

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