# **COLOR Cubes**



# Coarse Wavelength Division Multiplexer – CWDM mux or demux, 8 channels with upgrade, 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
- · Includes upgrade port, un-muxed signals passed through
- · 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)		
		(all values refer to single	mode/multi mode	: see separate datasheet)
Channels		8+1		
Center Wavelength [nm]		8 channels with in one 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			391 / 1411 / 1431 / 1451
Optical Bandwidth		> 13 nm (higher bandwidth on request)		
Upgrade Port		1310+/-50nm	C-8B	
		1260nm1458.5nm	C-8F	
		1464.5nm1617.5nm	C-8G	
Insertion Loss *	•		Standard	Premium
		Mux	< 2.5 dB	< 2.2 dB
		Demux	< 2.7 dB	< 2.4 dB
Isolation **			Mux	Demux
		CWDM ports	> 13 dB	> 30 dB (adj.) / > 40 dB
		UG port	> 15 dB	> 40 db
Return Loss *		> 45 dB (50 dB typ.)		
Directivity (for mux)		> 50 dB		
Polarization Dependent Loss		< 0.25 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		Mux: 19 x 15.5 x 9 mm <sup>3</sup> / Demux: 22 x 15.5 x 10.5 mm <sup>3</sup>		

<sup>\*</sup> With passband, valid over full temperature range and at all states of polarization but without connector losses

Additional components according to your specifications on request! Please contact us for further details.

<sup>\*\*</sup> Valid over full temperature range and at all wavelengths across the channel.

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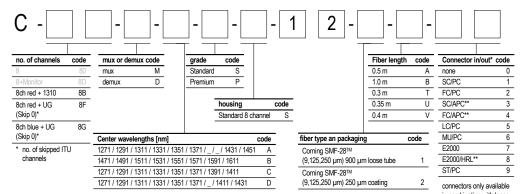


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### **Ordering Information**

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-8F-M-B-S-S-12-1-B-15



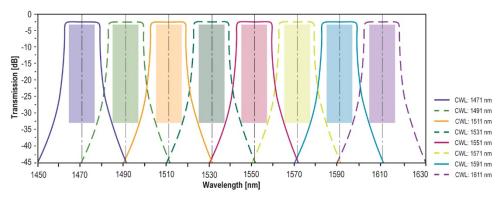
tube fiber protection

\* device regarded as

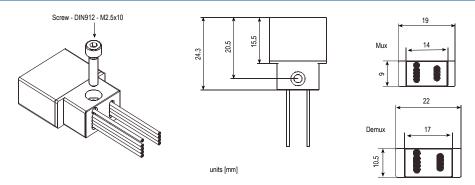
\*\* 8° angular polishing

### Further configuration on request!

## **Typical Spectral Performance of 8 Channel Multiplexer**



### Standard 8 channel housing



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demultiplexer