

# Coarse Wavelength Division Multiplexer – CWDM

## > mux or demux, 8 channels, single mode, ultra low loss



### 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
- Ultra low insertion loss for long distance applications
- Metro Core, Metro Access, Metro Enterprise, Cable TV, 3G Telephony (UMTS), Datacomm, WAN, RFTS, Sensor Applications
- Analog and digital transmission systems

### Specifications

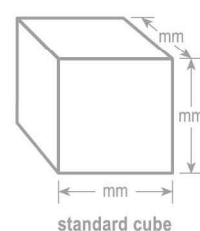
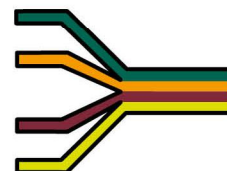
Parameters	Coarse Wavelength Division Multiplexer – mux/demux (all values refer to single mode)	
Channels	8	
Center Wavelength [nm]	8 channels in band 1 (red band) 1471 / 1491 / 1511 / 1531 / 1551 / 1571 / 1591 / 1611 other wavelength upon request; please contact CUBO	
Optical Bandwidth	> 13 nm (higher bandwidth on request)	
Insertion Loss *	1.3 dB	
Link Loss * for mux – demux pair	2.6 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 <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.

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

Our COLOR-Cubes bring color into play.



standard cube

All information contained herein is believed to be accurate and is subject to change without notice. No responsibility is assumed for its use. Cube Optics AG, its subsidiaries and affiliates, or manufacturer, reserve the right to make changes without notice, to product design, product components and product manufacturing methods. Some specific combinations of options may not be available. Please contact Cube Optics AG for more information.

**Cube Optics AG**

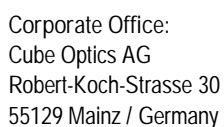
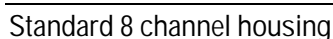


Indicate your requirements by selecting one option from each configuration table. Please write the corresponding codes in the available boxes to form your part number. For more information on this or other products and their availability, please contact Cube Optics AG at +49-6131-69851-0 or via e.mail at [sales@cubeoptics.com](mailto:sales@cubeoptics.com), or visit our website at [www.cubeoptics.com](http://www.cubeoptics.com).

C -   -  -  -  -  - 0  1 -  -  -

\* Configuration is not reflected by this datasheet.

### Typical Spectral Performance of 8 Channel Multiplexer



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