



# Dense Wavelength Division Multiplexer - DWDM

## Features

- Equal losses for de- or multiplexing applications, devices may be used as multiplexer or de-multiplexer
- Upgrade channel available
- Micro-hybrid construction in a sealed metal housing
- Epoxy-free optical path
- Extremely small component dimensions: 15 x 15 x 15 mm<sup>3</sup>, other dimensions on demand
- Flexible Fiber Connection Technology (FFCT), for details see Products page
- All types of single mode fibers possible
- ITU-grid
- Fiber packaging: loose tube or 250µm coating

## Applications

- Bi-directional or unidirectional systems
- Combines / separates up to 4 channels with a channel spacing of 200 GHz
- Cable TV, Metro Core, Metro Access, Metro Enterprise, WAN, RFTS

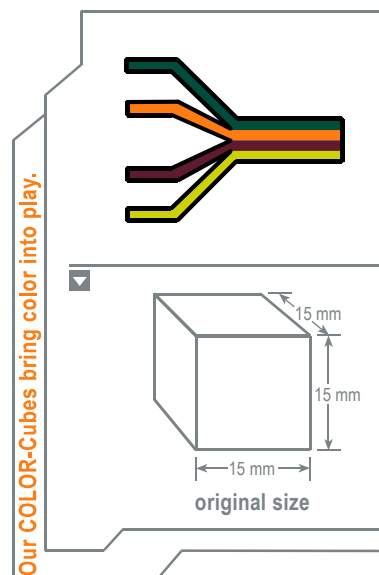
## Specifications

Parameters	Dense Wavelength Division Multiplexer – DWDM	
Channels	add-drop, 4, or 4 plus upgrade	
Channel spacing	200 GHz	
Center wavelengths	ITU-grid channels of C-, L- band	
Insertion loss*	4-channel DWDM	< 3 dB
	add-drop DWDM	< 2 dB
Isolation**	adjacent channel	> 25 dB
	non-adjacent channel	> 40 dB
Return loss *	> 50 dB	
Directivity	> 50 dB	
Polarization dependent loss	< 0.2 dB	
Operating temperature	0°C – 70°C	
Storage temperature	-45°C – 85°C	
Package dimensions	15 x 15 x 15 mm <sup>3</sup>	

\* It is the max. loss at entire wavelength range, valid over full temperature range and at all states of polarization but without connector losses.

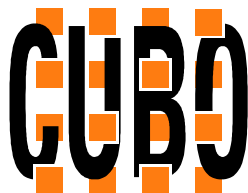
\*\* Valid over full temperature range and at all wavelengths across the channel

Additional components according to your specifications on demand!



## V 4.0

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## Ordering Information

Indicate your requirements by selecting one option from each configuration table. Please print 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 - 6131-698510 or via e.mail at sales@cubeoptics.com, or visit our website at www.cubeoptics.com.

### Ordering example: D-4-A-L88-0-S-2-B-15

D-  -  -  -  -  -  -  -  -  -  -

no. of channels	code
2	2
4	4

channel spacing	code
200 GHz	A

ITU-Grid no. of the first channel from C- or L-band	wavelength	code
...	...	...
1579.52 nm		L98
1578.69 nm		L99
1577.86 nm		L00
1577.03 nm		C01
1576.20 nm		C02
...	...	...
customized		XXX

optional features	code
none	0
upgrade channel	1

fiber connection	code
in- and output on same side	S
in- and output on opposite sides	O
rectangular connection	R

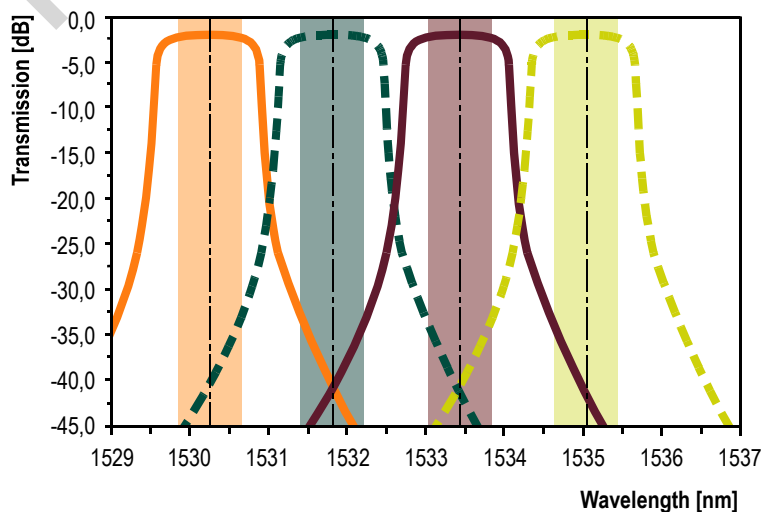
fiber length	code
0.5 m	A
1 m	B
1.4 m	C

fiber type and packaging	code
Corning SMF-28™ (9,125,250 µm) 900 µm loose tube	1
Corning SMF-28™ (9,125,250µm) 250 µm coating	2

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/HRL	7

\* device regarded as demultiplexer  
\*\* 8° angular polishing

## Spectral Performance



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