

Dense Wavelength Division Multiplexer – DWDM

> mux or demux, 4, 8 or 16 channels, 200 GHz

Features

- Low Insertion Loss
- High Channel Isolation
- Epoxy-Free in Optical Path
- Telcordia Compliant
- 4, 8 or 16 Channels Configuration

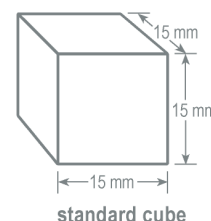
Technical Specifications

Parameter			Unit	Grade "A"		
Channel Spacing			Ch	200 GHz		
Channel Number			Ch	4	8	16
Central Wavelength (λ_c)			nm	C&L Bands		
Passband		Min.	nm	ITU +/- 0.25		
Isolation	Mux	Adjacent Channel	Min.	dB	12	
		Non-adjacent Ch	Min.	dB	30	
	Demux	Adjacent Channel	Min.	dB	27	
		Non-adjacent Ch	Min.	dB	40	
Insertion Loss ¹	Mux	Max.	dB	1.7	2.9	3.3
	Demux	Max.	dB	2.0	3.2	3.5
Ripple in Passband		Max.	dB	0.5		
Directivity		Min.	dB	50		
Polarization Dependent Loss		Max.	dB	0.2	0.2	0.2
Polarization Mode Dispersion		Max.	ps	0.20		
Return Loss ²		Min.	dB	45		
Fiber Type				Corning SMF-28 with 900 μ m buffer		
Fiber Length		Min.	m	1.0 +/- 0.1		
Power Handling		Max.	mW	300		
Operating Temperature			°C	-5 ~70		
Storage Temperature			°C	-40 ~ 85		
Package Dimension	Type 1			4	8	16
		Length	Max. mm	100	100	120
		Width	Max. mm	68	68	80
		Height	Max. mm	9	12	14
	Type 2					
		Length	Max. mm	70	70	-
		Width	Max. mm	45	45	-
		Height	Max. mm	9	9	-

¹ Max Insertion loss within channel Pass band over operating temperature range and all states of polarization without optical connectors. The typical connector loss is 0.4 dB for a pair of connectors.

² Return Loss without optical connectors.

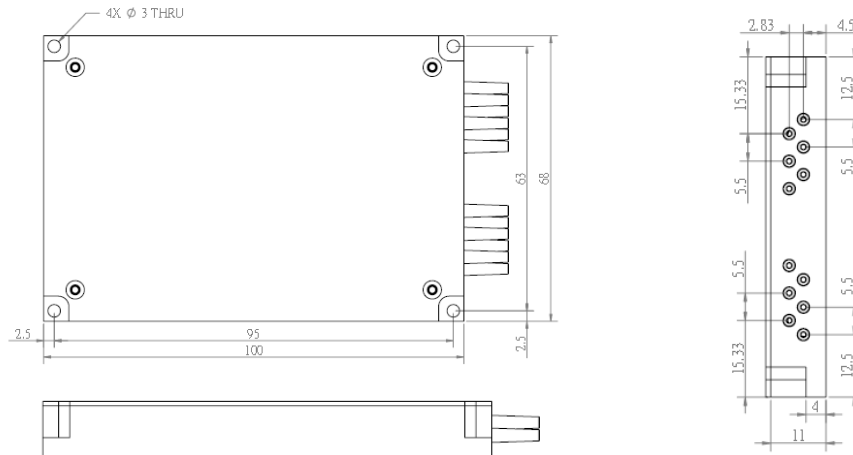
Our COLOR-Cubes bring color into play.



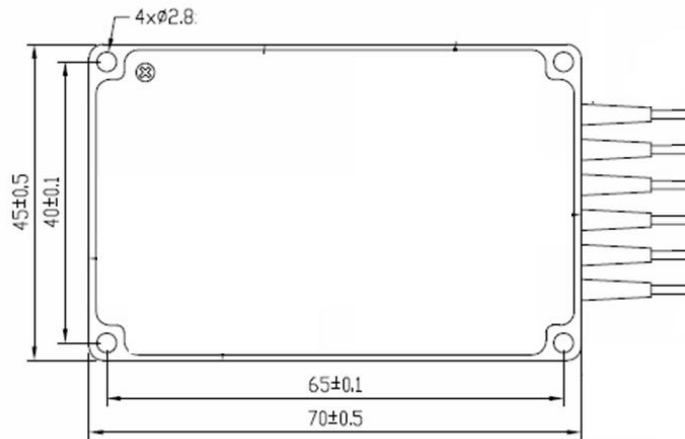
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Dimensions



refers to Type 1 package (100x80x12mm)



refers to Type 2 package (70x45x9mm)

Ordering Information

Indicate your requirements by selecting one option from each configuration table (see page 3). 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, or visit our website at www.cubeoptics.com.

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Example order code: CUBO-DWDM200-04-21-A-D-1-A-33

CUBO-DWDM200		-	-	-	-	-	-	-	-	-	-	-
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Channel Number	Initial Channel	Mux / Demux	Fiber length	Connector
04 = 4 channels	21 = C21/ 1560.61nm	M = Mux	A = 0.5 m	(x) common port
08 = 8 channels	:	D = Demux	B = 1 m	(y) DWDM port
16 = 16 channels	59 = C59 / 1530.33nm	C = Mux & Demux ¹		Code
32 = 32 channels				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	Packaging
A = 900 µm loose tube	1 = Type 1
B = 900 µm tight buffer fiber	2 = Type 2
C = 2 mm cable	
D = 3 mm cable	

1 Please specify the function sketch and outline drawing for Mux & Demux integration package when ordering.

2 By DWDM L band requirement please contact Cube optics.

ITU Grid Standard Wavelength Reference Table

Channel Number	Frequency (GHz)	Wavelength (nm)	Channel Number	Frequency (GHz)	Wavelength (nm)
C21	192100	1560.61	C41	194100	1544.53
C22	192200	1559.79	C42	194200	1543.73
C23	192300	1558.98	C43	194300	1542.94
C24	192400	1558.17	C44	194400	1542.14
C25	192500	1557.36	C45	194500	1541.35
C26	192600	1556.55	C46	194600	1540.56
C27	192700	1555.75	C47	194700	1539.77
C28	192800	1554.94	C48	194800	1538.98
C29	192900	1554.13	C49	194900	1538.19
C30	193000	1553.33	C50	195000	1537.40
C31	193100	1552.52	C51	195100	1536.61
C32	193200	1551.72	C52	195200	1535.82
C33	193300	1550.92	C53	195300	1535.04
C34	193400	1550.12	C54	195400	1534.25
C35	193500	1549.32	C55	195500	1533.47
C36	193600	1548.51	C56	195600	1532.68
C37	193700	1547.72	C57	195700	1531.90
C38	193800	1546.92	C58	195800	1531.12
C39	193900	1546.12	C59	195900	1530.33
C40	194000	1545.32	C60	196000	1529.55

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