

## DWDM module

### Description

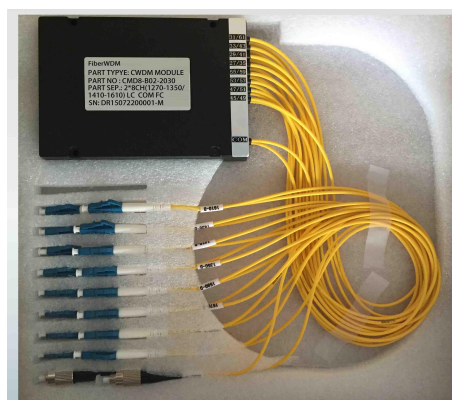
DWDM multi-channel multiplexer /demultiplexer (Mux /DeMux ) modules are available on ITU channel spacing of 100GHz. They demonstrate low loss, temperature insensitivity and reliable performance in any system application.Fixed Mux/DeMux modules offer low-cost wavelength management solutions that are suitable for long haul, metro, and access application.

### Features

- Low Insertion Loss
- High Isolation
- Low PDL
- Compact Design
- Good channel-to-channel uniformity

### Applications

- DWDM System
- PON Networks
- CATV Links
- Fiber optical amplifier
- Wavelength routing



### Specifications

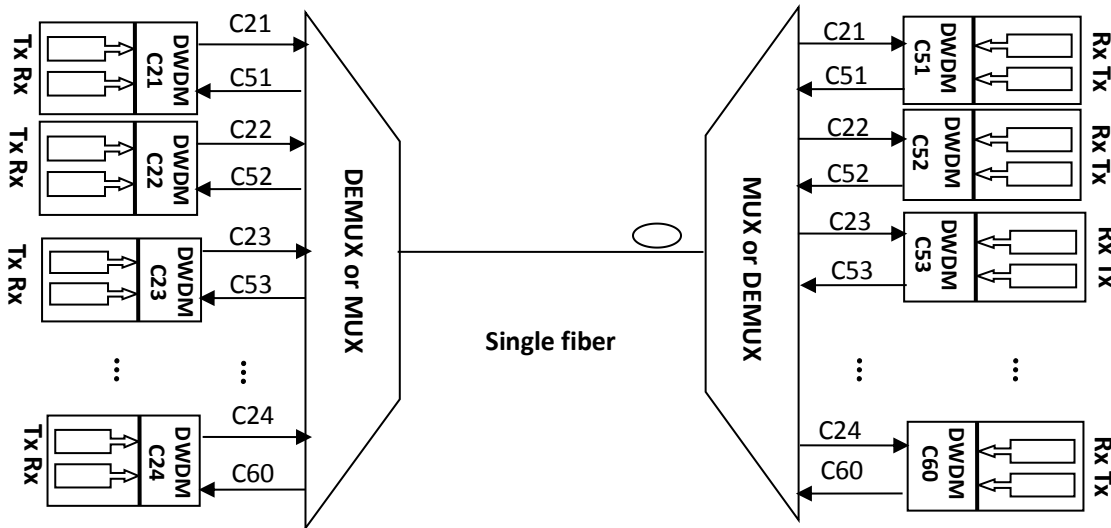
Item	Unit	Parameters		
Channel Spacing	GHz	100GHz		
Wavelength Range		C- band ITU channels		
Channel Centers	nm	ITU		
Channels	ch	4	8	16
Passbandwidth	nm	≥ +/- 0.13		
Passband Ripple	dB	≤ 0.5		
Channel Insertion Loss	dB	≤1.5	≤2.5	≤4.8
Channel EXP Insertion Loss	dB	≤1.8	≤2.8	≤5.0
Isolation (adjacent channel)	dB	≥30		
Isolation (non-adjacent channel)	dB	≥ 40		
Polarization Dependent Loss	dB	≤ 0.2		
Polarization Mode Dispersion	ps	≤ 0.2		
Directivity	dB	≥ 50		
Return Loss	dB	≥ 45		
Optical Power Handling	mW	≤ 500		
Operating Temperature Range	0C	-5 to 70		
Storage Temperature Range	0C	-40 to +85		

Fiber Type	NA	SMF-28e+
Package dimensions	mm	L100 x W80 x H10 (2CH-8CH)
		L142 x W102 x H14.5 (9CH-18CH)

All the specifications are based on the devices without connector

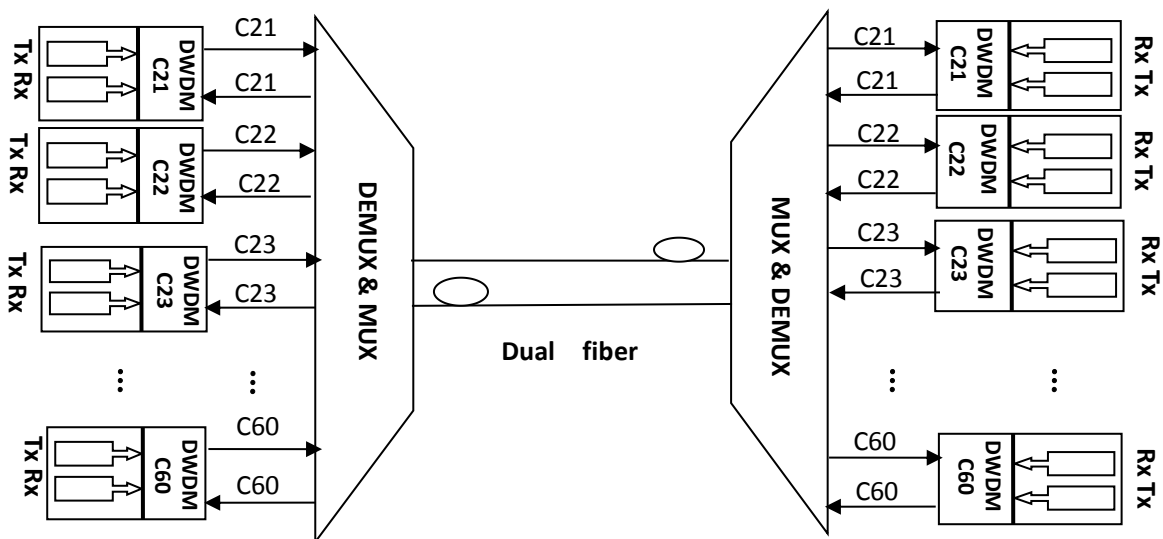
### Applications configuration diagram

#### 1 single fiber



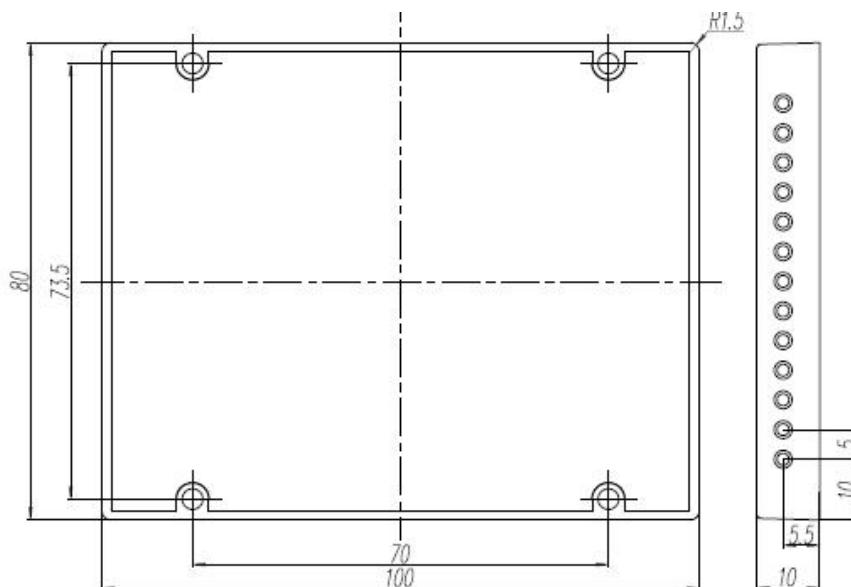
Simplex Bi-Directional Transmission should be used in pairs, MUX/DEMUX port for specific wavelength must be opposite

#### 2 Dual fiber

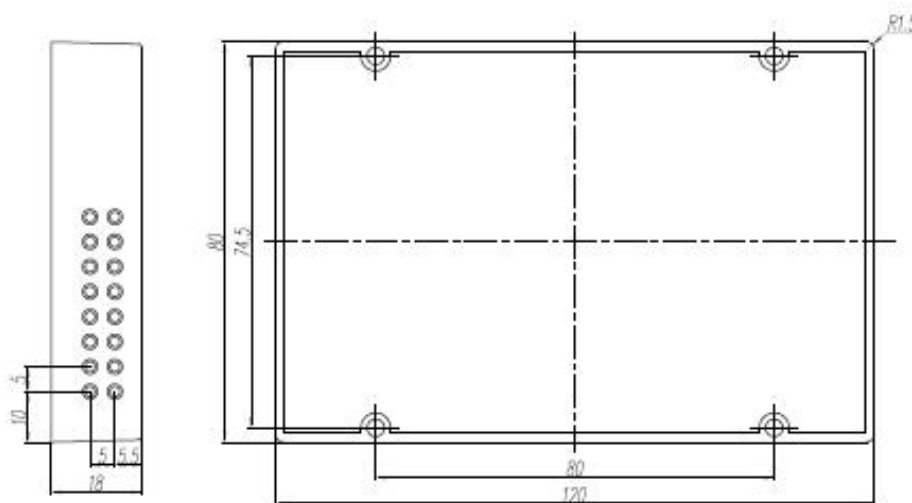


**Package Information**

1) ABS BOX 100\*80\*10mm



2) ABS BOX 120\*80\*18mm



**Ordering information (DWDM-50-4-C20-1-1-0)**

Product	Frequency	Channel	ITU channel	Fiber Type	Fiber Length	Connector
DWDM	50=50G 10=100G 20=200G	4=4 channel 8=8 channel 16=16 channel	C20= 1561.42 nm C21= 1560.61 nm ...	1=Bare fiber 2=900um 3=3.0mm	1=1m 2=2m	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=LC

### On ITU grid in C-band

Channel	Frequency (THz)	Wavelength (nm)	Channel	Frequency (THz)	Wavelength (nm)
H60	196.05	1529.163	C60	196	1529.553
H59	195.95	1529.944	C59	195.9	1530.334
H58	195.85	1530.725	C58	195.8	1531.116
H57	195.75	1531.507	C57	195.7	1531.898
H56	195.65	1532.290	C56	195.6	1532.681
H55	195.55	1533.073	C55	195.5	1533.465
H54	195.45	1533.858	C54	195.4	1534.250
H53	195.35	1534.643	C53	195.3	1535.036
H52	195.25	1535.429	C52	195.2	1535.822
H51	195.15	1536.216	C51	195.1	1536.609
H50	195.05	1537.003	C50	195	1537.397
H49	194.95	1537.792	C49	194.9	1538.186
H48	194.85	1538.581	C48	194.8	1538.976
H47	194.75	1539.371	C47	194.7	1539.766
H46	194.65	1540.162	C46	194.6	1540.557
H45	194.55	1540.953	C45	194.5	1541.349
H44	194.45	1541.746	C44	194.4	1542.142
H43	194.35	1542.539	C43	194.3	1542.936
H42	194.25	1543.333	C42	194.2	1543.730
H41	194.15	1544.128	C41	194.1	1544.526
H40	194.05	1544.924	C40	194	1545.322
H39	193.95	1545.720	C39	193.9	1546.119
H38	193.85	1546.518	C38	193.8	1546.917
H37	193.75	1547.316	C37	193.7	1547.715
H36	193.65	1548.115	C36	193.6	1548.515
H35	193.55	1548.915	C35	193.5	1549.315
H34	193.45	1549.715	C34	193.4	1550.116
H33	193.35	1550.517	C33	193.3	1550.918
H32	193.25	1551.319	C32	193.2	1551.721
H31	193.15	1552.122	C31	193.1	1552.524
H30	193.05	1552.926	C30	193	1553.329
H29	192.95	1553.731	C29	192.9	1554.134
H28	192.85	1554.537	C28	192.8	1554.940
H27	192.75	1555.343	C27	192.7	1555.747
H26	192.65	1556.151	C26	192.6	1556.555
H25	192.55	1556.959	C25	192.5	1557.363
H24	192.45	1557.768	C24	192.4	1558.173
H23	192.35	1558.578	C23	192.3	1558.983
H22	192.25	1559.389	C22	192.2	1559.794
H21	192.15	1560.200	C21	192.1	1560.606