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RAYCORE

Q3-S207 V3.3E

# Specification of 100G DWDM MUX/DEMUX for 19" Rack Mount

Part Number: AWDC-Dxxx-xx000-xx

Dense Wavelength Division Multiplexing (DWDM) is a type of optical wavelength management device that are based on proven ultra low-loss thin-film filter (TFF) technology. It features high reliability, high extensibility, and simultaneous transmission of multi-wavelength. DWDM has gained prevalence in multi-wavelength digital transport architectures because it enables the use of very low cost un-cooled distributed feedback (DFB) laser transmitters. Moreover, their powering requirements are reduced and reliability is increased.

Raycore provides whole series of 1xN DWDM products that are tailored for specific applications. All products meet GR-1209-CORE, GR-1221-CORE and ITU-T G.694.1 requirements.

### Features

- Low Insertion Loss
- High Isolation
- Low PDL
- Good channel-to-channel uniformity
- High Reliability and Stability

### Applications

- DWDM System
- PON Networks
- CATV Links

### Compliance

- Telcordia GR-1209-CORE
- Telcordia GR-1221-CORE
- RoHS



## Specifications

### 1x4 & 1x8 & 1x16 DWDM Mux/Demux for 19" Rack Mount

Parameters		1x4	1x8	1x16
Channel Space (GHz)		100G		
Center Wavelength (nm)		ITU Grid		
Center Wavelength Accuracy (nm)		± 0.05		
Channel Pass-Band (@-0.5dB) (nm)		0.22		
Fiber Type		SMF-28e or customer specified		
IL (dB)		1.8	3.0	4.0
Pass-Band Ripple (dB)		0.35	0.4	0.5
Isolation (dB)	Adjacent Channel	25		
	Non-Adjacent Channel	40		
PDL (dB)		0.2		
PMD (ps)		0.1		
RL (dB)		45		
Directivity (dB)		50		
Maximum Optical Power (mW)		300		
Operating Temperature (°C)		-5~65		
Storage Temperature (°C)		-40~85		
19" Rack mount Package		1U High		

Notes:

1. Specified without connectors.
2. Add an additional 0.2dB loss per connector.



### Ordering Information

Part Number	Description
AWDC-DM4x-xx000-xx	1x4 100G DWDM MUX for 19" Rack Mount
AWDC-DD4x-xx000-xx	1x4 100G DWDM DEMUX for 19" Rack Mount
AWDC-DM8x-xx000-xx	1x8 100G DWDM MUX for 19" Rack Mount
AWDC-DD8x-xx000-xx	1x8 100G DWDM DEMUX for 19" Rack Mount
AWDC-DMDx-xx000-xx	1x16 100G DWDM MUX for 19" Rack Mount
AWDC-DDDx-xx000-xx	1x16 100G DWDM DEMUX for 19" Rack Mount
AWDC-DA4x-xx000-xx	1x4 100G DWDM MUX/DEMUX (Dual Fiber) for 19" Rack Mount
AWDC-DA8x-xx000-xx	1x8 100G DWDM MUX/DEMUX (Dual Fiber) for 19" Rack Mount
AWDC-DADx-xx000-xx	1x16 100G DWDM MUX/DEMUX (Dual Fiber) for 19" Rack Mount

## AWDC-Dxx X – XX 000-XX

Option:            A        B            B

Option A: Connector Type (x)

1= SC/UPC, 2= SC/APC, 3= LC/UPC, 4= LC/APC, 7= SC/UPC, 8=SC/APC

Option B: DWDM ITU Channel (xx 000- xx), ex: 56 000- 49 show is channel 56 to 49.

Channel No.	Wavelength (nm)	Frequency (THz)
61	1528.77	196.10
60	1529.55	196.00
59	1530.33	195.90
58	1531.12	195.80
57	1531.90	195.70
56	1532.68	195.60
55	1533.47	195.50
54	1534.25	195.40
53	1535.04	195.30
52	1535.82	195.20
51	1536.61	195.10
50	1537.40	195.00
49	1538.19	194.90
48	1538.98	194.80
47	1539.77	194.70
46	1540.56	194.60
45	1541.35	194.50
44	1542.14	194.40
43	1542.94	194.30
42	1543.73	194.20
41	1544.53	194.10
40	1545.32	194.00
39	1546.12	193.90

Channel No.	Wavelength (nm)	Frequency (THz)
38	1546.92	193.80
37	1547.72	193.70
36	1548.51	193.60
35	1549.32	193.50
34	1550.12	193.40
33	1550.92	193.30
32	1551.72	193.20
31	1552.52	193.10
30	1553.33	193.00
29	1554.13	192.90
28	1554.94	192.80
27	1555.75	192.70
26	1556.55	192.60
25	1557.36	192.50
24	1558.17	192.40
23	1558.98	192.30
22	1559.79	192.20
21	1560.61	192.10
20	1561.42	192.00
19	1562.23	191.90
18	1563.05	191.80
17	1563.86	191.70

