



Athermal AWG DWDM 100GHz Module

Part Number: F520-AAWGxx



Overview

AAWGxx is a combined passive 40/48 channel 100GHz DWDM multiplexer and de-multiplexer (MUX & DEMUX), It combines standard 100GHZ DWDM ITU grid channels 21 through 60, and Applies to F520 Series Chassis 1U, 2U and 5U, occupying 2 service slots .The AAWG40 is ideal for increasing the fiber capacity between two sites without the need for installing or leasing additional fibers. The complete passive solution requires no power cabling and no configuration; it is a true plug and play solution. The AAWG40 enables separation of the active equipment from wavelength multiplexing components. It is used in conjunction with active optical devices applied in C-band wavelength range with MAX expanding up to 40 channels.

Applications

- Metro DWDM distance extension
- Long-Haul transmission system

Features

- Channel spacing 100GHz (0.8nm) up to MAX 40 channels can be multiplexed
- High integration
- Low insertion loss $\leq 6\text{dB}$, typical 4.5dB
- High channel isolation
- Adjacent isolation $\geq 25\text{dB}$
- Non-adjacent isolation $\geq 35\text{dB}$
- Perfect indicator status
- Advanced network management feature : Support SNMP, CLI, WEB approach
- Full graphical management
- Support all F520 Chassis
- All Chassis support 19" Rack



Specification

Parameters	Min	Typ	Max	Unit
Channel Counts	40 / 48			
Channel Spacing	100			GHz
Channel Center Wavelength	C -band			nm
Center Frequency Accuracy	±0.05			nm
1 dB Passband	0.36			nm
3 dB Passband	0.6			nm
Insertion Loss Passband			6.0	dB
Adjacent channel isolation	25			dB
Non-adjacent,channel isolation	35			dB
Total Crosstalk	21			
Insertion Loss Uniformity	1.0			dB
Directivity (Mux Only)	45			dB
Insertion Loss Ripple	0.75			dB
Optical Return Loss	45			dB
Polarization Dependent Loss (PDL)			0.5	dB
Polarization Mode Dispersion (PMD)	0.5			ps
Maximum Optical Power	23			dBm
Operating Temperature	-10 ~ +60 °C			°C
Storage Temperature	-40 ~ +85 °C			°C
Relative Humidity	5 to 95% maximum, non-condensing			
Size	191(W) x 253(D) x 41(H)			mm



ITU Grid 100GHz Channels List

Channel	Central Wavelength(nm)	Frequency (THZ)
CH61	1528.77	196.1
CH60	1529.55	196.0
CH59	1530.33	195.9
CH58	1531.12	195.8
CH57	1531.90	195.7
CH56	1532.68	195.6
CH55	1533.47	195.5
CH54	1534.25	195.4
CH53	1535.04	195.3
CH52	1535.82	195.2
CH51	1536.61	195.1
CH50	1537.40	195.0
CH49	1538.19	194.9
CH48	1538.98	194.8
CH47	1539.77	194.7
CH46	1540.56	194.6
CH45	1541.35	194.5
CH44	1542.14	194.4
CH43	1542.94	194.3
CH42	1543.73	194.2
CH41	1544.53	194.1
CH40	1545.32	194.0
CH39	1546.12	193.9
CH38	1546.92	193.8
CH37	1547.72	193.7
CH36	1548.51	193.6
CH35	1549.32	193.5
CH34	1550.12	193.4
CH33	1550.92	193.3
CH32	1551.72	193.2
CH31	1552.52	193.1
CH30	1553.33	193.0
CH29	1554.13	192.9
CH28	1554.94	192.8
CH27	1555.75	192.7
CH26	1556.55	192.6
CH25	1557.36	192.5
CH24	1558.17	192.4
CH23	1558.98	192.3



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CH22	1559.79	192.2
CH21	1560.61	192.1
CH20	1561.42	192.0
CH19	1562.23	191.9
CH18	1563.05	191.8
CH17	1563.86	191.7
CH16	1564.68	191.6
CH15	1565.50	191.5
CH14	1566.31	191.4

Ordering Information

Part No.	Wavelength and ITU Grid 100GHz Channel
AAWG40	1560.61nm ~ 1529.55nm (CH21 ~ CH60)
AAWG40S	1560.61nm ~ 1529.55nm (CH21 ~ CH60) with OSC port
AAWG48	1560.61nm ~ 1529.55nm (CH14 ~ CH61)
AAWG48S	1560.61nm ~ 1529.55nm (CH14 ~ CH61) with OSC port