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OTN SYSTEMS WDM PLATFORMS

DWDM OADM Module

The DWDM OADM Module is a passive thin-film-filter (TFF) optical add-drop multiplexer for DWDM network wavelength uplink/downlink applications. It operates on the ITU-T G.694.1 grid with 100GHz (0.8nm) channel spacing across 1525–1565nm, dropping and adding selected channels while passing the rest through transparently, with low insertion loss and high channel isolation.



HIGHLIGHTS

Low insertion loss

Thin-film-filter technology keeps both through-path and add/drop-path insertion loss low.

1 to 16 channels dropped

Five drop-count options, transparent pass-through for the remaining channels.

Three package options

ABS box, LGX box or 1U rackmount, to match the installation style.

High channel isolation

≥30dB adjacent / ≥40dB non-adjacent channel isolation.

High stability & reliability

Conforms to ITU-T G.694.1 and Telcordia GR-1209/GR-1221.

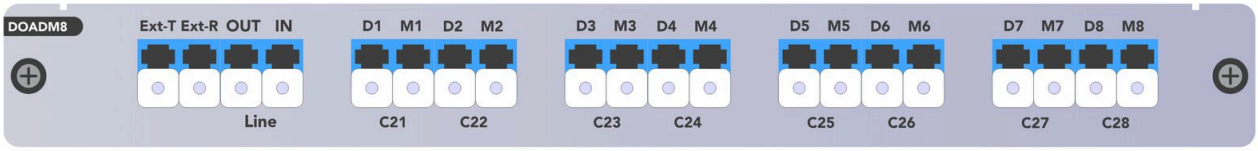
RoHS-6 compliant

Lead-free construction.

FORMAT

ABS MODULE | LGX | 1U

FRONT PANEL



SPECIFICATIONS

Optical	
Operating Wavelength Range	1525–1565nm
Channel Center Wavelength	ITU-T grid
Channel Spacing	100GHz (0.8nm)
Channel Bandwidth	ITU ±0.11nm
Flatness	≤0.5dB
Adjacent Channel Isolation	≥30dB
Non-Adjacent Channel Isolation	≥40dB
Return Loss	≥45dB
Directionality	≥45dB
Polarization-Related Loss	≤0.2dB
Polarization Mode Dispersion	≤0.2ps
Maximum Withstanding Optical Power	≤500mW
Environmental & Mechanical	
Operating Temperature	0°C–+70°C
Storage Temperature	−40°C–+85°C
Compliance	ITU-T G.694.1 · Telcordia GR-1209-CORE · Telcordia GR-1221-CORE · RoHS-6
Package Type	ABS box · LGX box · 1U 19” rackmount

CHANNEL COUNT

CHANNEL COUNT	THROUGH-PATH INSERTION LOSS	ADD/DROP-PATH INSERTION LOSS
1	≤0.8dB	≤0.8dB
2	≤1.2dB	≤1.2dB
4	≤1.8dB	≤2.0dB
8	≤2.6dB	≤3.2dB
16	≤4.5dB	≤5.3dB

DWDM CHANNEL GRID REFERENCE

ITU-T G.694.1, 100GHz grid, C-band.

CHANNEL	FREQUENCY	WAVELENGTH
CH21	196.1THz	1528.77nm
CH22	196.0THz	1529.55nm
CH23	195.9THz	1530.33nm
CH24	195.8THz	1531.12nm
CH25	195.7THz	1531.9nm
CH26	195.6THz	1532.68nm
CH27	195.5THz	1533.47nm
CH28	195.4THz	1534.25nm
CH29	195.3THz	1535.04nm
CH30	195.2THz	1535.82nm
CH31	195.1THz	1536.61nm
CH32	195.0THz	1537.4nm
CH33	194.9THz	1538.19nm
CH34	194.8THz	1538.98nm
CH35	194.7THz	1539.77nm
CH36	194.6THz	1540.56nm
CH37	194.5THz	1541.35nm
CH38	194.4THz	1542.14nm
CH39	194.3THz	1542.94nm
CH40	194.2THz	1543.73nm
CH41	194.1THz	1544.53nm
CH42	194.0THz	1545.32nm
CH43	193.9THz	1546.12nm
CH44	193.8THz	1546.92nm

CHANNEL	FREQUENCY	WAVELENGTH
CH45	193.7THz	1547.72nm
CH46	193.6THz	1548.51nm
CH47	193.5THz	1549.32nm
CH48	193.4THz	1550.12nm
CH49	193.3THz	1550.92nm
CH50	193.2THz	1551.72nm
CH51	193.1THz	1552.52nm
CH52	193.0THz	1553.33nm
CH53	192.9THz	1554.13nm
CH54	192.8THz	1554.94nm
CH55	192.7THz	1555.75nm
CH56	192.6THz	1556.55nm
CH57	192.5THz	1557.36nm
CH58	192.4THz	1558.17nm
CH59	192.3THz	1558.98nm
CH60	192.2THz	1559.79nm
CH61	192.1THz	1560.61nm

ORDERING INFORMATION

NAME	DWDM OADM Module
DESCRIPTION	DWDM OADM Module, passive thin-film-filter (TFF) optical add-drop multiplexer for DWDM wavelength uplink/downlink applications, ITU-T G.694.1 grid, 100GHz (0.8nm) channel spacing, 1525-1565nm. Drops and adds selected channels while passing the rest through transparently.
PART NUMBER	WDM-DOADM- **{Start}** - **{Channels}** - **{Format}**

{Start}	First dropped channel number, CH21–CH61 (ITU-T G.694.1 100GHz grid, step 1), see grid reference table above, required
{Channels}	1 · 2 · 4 · 8 · 16, see Channel Count table above, required
{Format}	ABS (ABS box) · LGX (LGX box) · 1U (1U rackmount), required

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