

Optical Multiplexers DWDM, CWDM and WDM Modules

DigiLink Video Transport System



FEATURES

Optical multiplexer features

- Low optical losses
- Passive design for reliability
- Bi-directional
- Industry standard ITU wavelengths
- Industry standard LC/PC connectors
- Most modules include expansion port (passes all other wavelengths)
- Compatible with all DigiLink chassis (including DL4000P passive 4 slot chassis)

WDM features

- 1310nm and 1550nm combiner/splitters
- Single or dual WDM options
- External WDM conserves chassis slot
- Split ratios from 50/50 to 1/99

CWDM features

- Industry standard ITU G.694.2 wavelengths
- Optically multiplex up to 18 channels over a single fiber
- 4, 8, 10, and 18 channel options
- Multiple 4 channel options

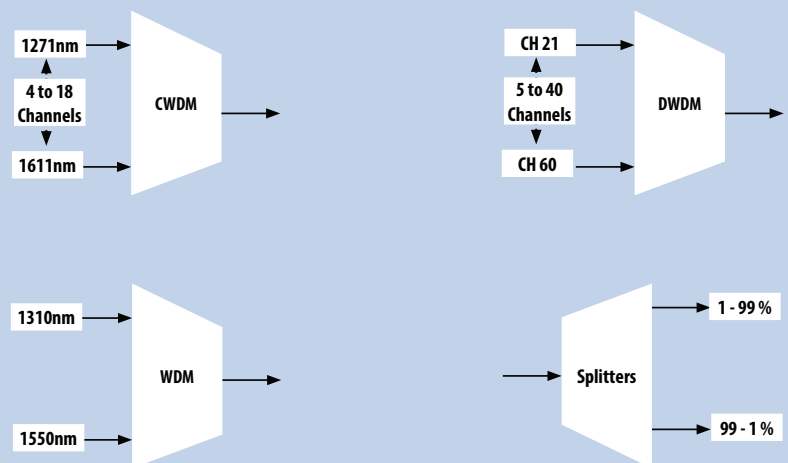
DWDM features

- Industry standard ITU G.694.1 wavelengths
- Optically multiplex up to 40 channels on a single fiber
- 4, 10, 20, and 40 channel options
- Interconnect modules to enable 40 channels in a single 1RU chassis

Artel's DWDM, CWDM, and WDM modules create a comprehensive set of optical multiplexing solutions for the DigiLink video transport system. These modules, in conjunction with other DigiLink modules or third party equipment, allow the creation of flexible, space and fiber efficient optical networks.

Artel designed its optical multiplexing products to address the issue of space and fiber constraints. For space efficiency, each module takes only one bay in a DigiLink chassis. By using ITU standard filters and optics, multi-vendor, cost-effective, and fiber efficient video and Ethernet can be created. Completely passive and designed with the latest optical filters, Artel's DWDM, CWDM, and WDM modules are extremely reliable, cost-effective, and feature low insertion losses.

Optical Multiplexers, Splitter and Combiners



WDM Ordering Information and Specifications | 1310nm and 1550nm

Model #	Description	Part #	# Channels	Channels	Insertion Loss	Adjacent Channel Isolation	Return Loss
DLOW1	Single WDM	390-008754-01	2	1310, 1550	≤1.4dB	≥ 30dB	≥ 40dB
DLOW2	Dual WDM	390-008754-02	2	1310, 1550	"	"	"
DLOWE	External WDM	390-008790-15	2	1310, 1550	"	"	"

CWDM Ordering Information and Specifications | Channels 1271 through 1611 of ITU G694.2

Model #	Part #	# Channels	Channels	Insertion Loss (±7.0 nm)	Adjacent Channel Isolation	Directivity	Return Loss	Insertion Loss Upgrade Port
DLOC4L	390-008752-00	4	1471, 1491, 1511, 1531	≤ 2.2dB	≥ 30dB	≥ 40dB	≥ 40dB	≤ 2.2dB
DLOC4M	390-008752-01	4	1511, 1531, 1551, 1571	"	"	"	"	"
DLOC4H	390-008752-02	4	1551, 1571, 1591, 1611	"	"	"	"	"
DLOC40	390-008752-03	4	1471,1491, 1591, 1611	"	"	"	"	"
DLOC8	390-008752-04	8	1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611	≤ 3.3dB	"	"	"	≤ 2.1dB
DLOC10	390-008752-10	10	1271,1291,1311,1331,1351, 1371,1391,1411,1431,1451	≤ 5.1dB	≥ 25dB	≥ 50dB	≥ 45dB	≤ 1.1dB
DLOC18	390-008752-18	18	1271,1291,1311,1331,1351,1371, 1391,1411,1431,1451,1471,1491, 1511,1531,1551,1571,1591,1611	≤ 6.1dB	"	"	"	N/A

DWDM Ordering Information and Specifications | Channels 21 through 60 of ITU G694.1

Model #	# Chans	Channels	Part #	Insertion Loss (±0.11 nm)	Adjacent Channel Isolation	Directivity	Return Loss	Uniformity	Insertion Loss Upgrade Port
DLOD421	4	21, 22, 23, 24	390-008762-21	≤ 2.4dB	≥ 25dB	≥ 50dB	≥ 40dB	≤ 1.0dB	≤ 1.9dB
DLOD425	4	25, 26, 27, 28	390-008762-25	"	"	"	"	"	"
DLOD429	4	29, 30, 31, 32	390-008762-29	"	"	"	"	"	"
DLOD433	4	33, 34, 35, 36	390-008762-33	"	"	"	"	"	"
DLOD437	4	37, 38, 39, 40	390-008762-37	"	"	"	"	"	"
DLOD441	4	41, 42, 43, 44	390-008762-41	"	"	"	"	"	"
DLOD445	4	45, 46, 47, 48	390-008762-45	"	"	"	"	"	"
DLOD449	4	49, 50, 51, 52	390-008762-49	"	"	"	"	"	"
DLOD453	4	53, 54, 55, 56	390-008762-53	"	"	"	"	"	"
DLOD457	4	57, 58, 59, 60	390-008762-57	"	"	"	"	"	"
DLOD1021	10	21-30@100GHz	390-008-765-21	≤ 4.1dB	"	"	"	"	≤ 4.1dB
DLOD1031	10	31-40@100GHz	390-008765-31	"	"	"	"	"	"
DLOD1041	10	41-50@100GHz	390-008765-41	"	"	"	"	"	"
DLOD1051	10	51-60@100GHz	390-008765-51	"	"	"	"	"	"
DLOD2021	20	21-40@100GHz	390-008766-21	≤ 5.1dB	"	"	"	"	≤ 5.1dB
DLOD2041	20	41-60@100GHz	390-008766-41	"	"	"	≥ 45dB	"	"
DLOD4021	40	21-60@100GHz	390-008767-21	≤ 6.1dB	"	≥ 40dB	≥ 40dB	"	N/A

Dual Window Wide Band Optical Splitters Ordering Information and Specifications

Model #	Description	Part #	Port 1	Ratio	Port 2	Port 1	Insertion Loss	Port 2
DLOS2	50/50 Optical Splitter	390-008753-00	50%		50%	≤ 4.0dB		≤ 4.0dB
DLOS2-01	1/99 Optical Splitter	390-008753-01	1%		99%	≤ 23.1dB		≤ 1.1dB
DLOS2-05	5/95 Optical Splitter	390-008753-05	5%		95%	≤ 15.1dB		≤ 1.1dB
DLOS2-10	10/90 Optical Splitter	390-008753-10	10%		90%	≤ 12.1dB		≤ 1.5dB
DLOS2-20	20/80 Optical Splitter	390-008753-20	20%		80%	≤ 8.6dB		≤ 2.1dB
DLOS2-30	30/70 Optical Splitter	390-008753-30	30%		70%	≤ 6.6dB		≤ 2.6dB
DLOS2-40	40/60 Optical Splitter	390-008753-40	40%		60%	≤ 5.1dB		≤ 3.6dB