



Optical Passives WDM/CWDM/DWDM CORWave™/CORWave II

Optical Multiplexers, Demultiplexers, and Optical Add/Drop Multiplexers (OADMs)

- Channel Plans:
 - CWDM ITU and DWDM ITU (20 nm and 100 GHz spacing respectively)
 - CORWave/CORWave II
 - Custom plans available
- Upgrade ports provide the ability to add additional wavelengths for more revenue generating services
 - Optional on all CWDM/DWDM multiplexers/demultiplexers
 - Standard on CORWave/CORWave II passives
- Upgrade port can act as OTDR injection port for fault detection/identification while the fiber remains in service (patent pending)
- Color-coded headend/field passives wavelengths (customer specific if desired)
- Styles for both headend and node configurations, including Tyco, flat box, tube style, and customer-specific styles
- LGX style compatible shelf
- 24 or 48 port LGX style passives with LC connectors conserve rack space
- Custom field configurations available



Cable operators are constantly challenged to add more capacity on existing fiber infrastructure in order to offer lucrative new services. Multi wavelength technology can ensure that the network is made to be more reliable, efficient and faster. The ARRIS line of WDM/CWDM/DWDM/CORWave/CORWave II optical multiplexers/demultiplexers and OADMs are part of an end to end solution that allows cable operators to quickly and easily deploy multi wavelength technology into their network architectures for node segmentation, fiber conservation or fiber repurposing for applications such as cell tower backhaul or RFoG.

These multi wavelength devices can serve as either a mux or demux and are available in many wavelength options.

- **WDM multiplexers/demultiplexers**—manage two wavelengths such as 1310/1550 nm or manage a group of wavelengths such as CWDM/1310 nm.
- **OADMs**—add or drop individual wavelengths to or from an existing group of wavelengths onto a separate fiber without having to separate all the wavelengths.
- **CWDM/DWDM/CORWave/CORWave II multiplexers/demultiplexers**—manage larger groups of wavelengths for multiport applications. Mux/demux pairs are optimized for minimum combined insertion loss across all channels. Upgrade ports are available on all ARRIS CWDM/DWDM multiplexers/demultiplexers and standard on CORWave/CORWave II multiplexers/demultiplexers for future network growth. Upgrade port can act as OTDR injection port for fault detection and identification while the fiber remains in service (patent pending)

WDM multiplexers/demultiplexers and OADMs are available in dual LGX style enclosures for the headend or basic splice tubes for field use. CWDM/DWDM/CORWave/CORWave II multiplexers/ demultiplexers are available in an LGX-style enclosure for the headend, and an Opti Max 3100/4100 fiber tray, flat box, or a Tyco splice tray with either standard 1 meter or user-specified pigtail lengths for field use. LGX style passives are available in high density 24 or 48 port configurations with LC connectors – 4x the density of standard LGX style passives with SC/APC connectors.

Headend/field passives wavelengths are color-coded according to defacto industry standards for simplification of installation, operation and maintenance. Color coding can be customer specific if desired.

All WDM/CWDM/DWDM/CORWave/CORWave II multiplexers/demultiplexers and OADMs can be configured with various fiber types and/or connector choices.

Available accessories include the standard LGX compatible OS1000 optical shelf, optical switch, optical attenuators, and various optical patch cords. The ARRIS Optical Splitters Product Flyer gives more information on splitters.

CORWave II Return DWDM Optical Passive Wavelength Plans

Wavelength (nm)	ITU Channel Available	Wavelength Plan 1 Fiber
1554.13	29	D4-MWR16
1553.33	30	C2-MWR10
1552.52	31	C1-MWR09
1551.72	32	B4-MWR08
1550.12	34	B3-MWR07
1549.32	35	A3-MWR03
1546.92	38	A1-MWR01
1544.53	41	A2-MWR02
1543.73	42	A4-MWR04
1540.56	46	B1-MWR05
1538.19	49	B2-MWR06
1537.40	50	C3-MWR11
1533.47	55	C4-MWR12
1532.68	56	D1-MWR13
1531.12	58	D2-MWR14
1530.33	59	D3-MWR15

Standard DWDM Optical Passive Return Wavelength Plans

Four Channels	Wavelength (nm)	ITU Channel Available	Eight Channels
Group 1	1557.36	25	Group 1
	1556.96	26	
	1555.75	27	
	1554.94	28	
Group 2	1554.13	29	
	1553.33	30	
	1552.52	31	
	1551.72	32	
Group 3	1550.92	33	Group 2
	1550.12	34	
	1549.32	35	
	1548.51	36	
Group 4	1547.72	37	
	1546.92	38	
	1546.12	39	
	1545.32	40	
Group 5	1544.53	41	Group 3
	1543.73	42	
	1542.94	43	
	1542.14	44	
Group 6	1541.35	45	
	1540.56	46	
	1539.77	47	
	1538.98	48	
Group 7	1538.19	49	Group 4
	1537.4	50	
	1536.61	51	
	1535.82	52	
Group 8	1535.04	53	
	1534.25	54	
	1533.47	55	
	1532.68	56	
Group 9	1531.9	57	
	1531.12	58	
	1530.33	59	
	1529.55	60	
Group 10	1528.77	61	
	1563.86	17	
	1563.05	18	
Group 11	1562.23	19	
	1560.61	21	
	1559.79	22	
	1558.98	23	
	1558.17	24	

Optical Multiplexers and Demultiplexers and Optical Add/Drop Multiplexers (OADMs)

CWDM Optical Wavelength Plans

	Group	Wavelengths (nm)	
		Forward	Return
Single Fiber	A	1291, 1311	1471, 1491
	B	1291, 1311	1591, 1611
	C		1471, 1491, 1591, 1611
	D		1471, 1491, 1511, 1531
	E		1551, 1571, 1591, 1611
	F		1511, 1531, 1551, 1571
	G	1291, 1311	1471, 1491, 1591, 1611
	H	1291, 1311	1471, 1491, 1511, 1531
	I	1291, 1311	1551, 1571, 1591, 1611
	J	1291, 1311	1511, 1531, 1551, 1571
	K		1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611
	L		1471, 1491
	M		1591, 1611
	N		1511, 1571
	O		1531, 1551
Dual Package	P	1291, 1311	1471, 1491
	Q	1291, 1311	1591, 1611
	R	1291, 1311	1471, 1491, 1591, 1611

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For additional information, please refer to the Optical Passives Technical specifications: [OPTPAS_TS_](#) or your ARRIS authorized salesperson.

Customer Care

Contact Customer Care for product information and sales

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