

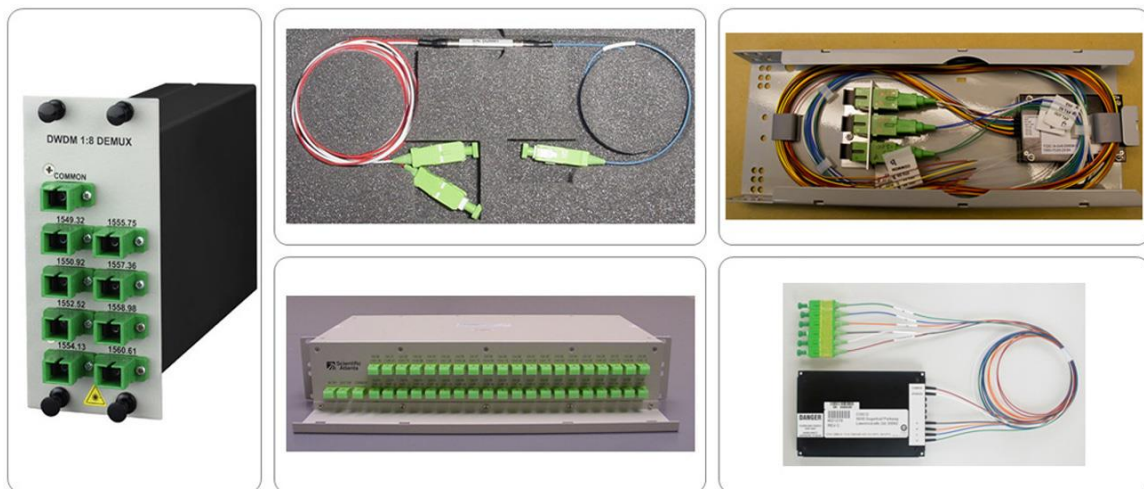
Cisco Prisma DWDM Passives

Product Overview

Facing competitive pressures and rapidly accelerating user demand for interactive services, cable operators need to upgrade their network architectures. These upgrade requirements are pushing optical fiber deeper into the network. But simply replacing existing transmission lines with fiber is no longer the most cost-effective way to handle increasing bandwidth requirements. Operators are now taking advantage of advances in optical filtering that significantly increase the number of signals (or wavelengths) that can be carried on a single fiber, a process known as dense wavelength-division multiplexing (DWDM).

Cisco® Prisma® multiplexer and demultiplexer components (Figure 1) are essential when DWDM is implemented to increase network efficiency by significantly reducing fiber counts. Most units are available in the industry-recognized, LGX-compatible form factor to allow easy, snap-in mounting in a variety of enclosures and cabinets. The LGX modules can be used in the same chassis as coupler, splitters, and patching modules to achieve high-density rack configurations. The Cisco Prisma multiplexer and demultiplexer components are also optimized to achieve low insertion loss at all wavelengths. The 40-channel wavelength parts are packaged in standard 1 or 2 RU enclosures that mount in any standard 19-inch equipment rack. A single-channel optical add-drop multiplexer (OADM) is also available in a raw filter package for outside plant applications.

Figure 1. Cisco Prisma LGX DWDM (Left), Raw Filter (Top Left), FOSC Basket (Top Right), Rack Mount Enclosure (Bottom Left), and Cassette (Bottom Right)



Features and Benefits

- Cisco Prisma multiplexer and demultiplexer modules (available in 4, 8, 12, 16, 20, and 40-channel configurations)
- Single-channel OADM available for greater design flexibility
- Channels spaced at 100 GHz or 200 GHz, following the standard ITU wavelength grid
- Wavelength mapping options that allow broadcast and narrowcast services to be combined on a single fiber
- Support for both analog and digital forward-path transmission applications, as well as reverse-path transmission applications, such as baseband digital reverse, to significantly increase bidirectional throughput
- Cisco Prisma multiplexer and demultiplexer pairs that are optimized for the lowest combined insertion loss across all wavelengths
- Module for multiplexer and demultiplexer applications
- LGX-compatible modules that easily snap into a wide variety of enclosures and cabinets
- Industry-standard SC/APC or LP/APC adapters that help ensure connector compatibility; reduce back reflection and insertion losses; simplify moves, adds, and changes; and reduce connector maintenance requirements
- LC connector option for 40-channel system to save rack space

Product Specifications

Table 1 and Table 2 provide product specifications for Cisco Prisma multiplexer and demultiplexer components.

Table 1. Unique Specifications

Specification	Units	1 Ch OADM [*]	4 Ch	8 Ch	12 Ch	16 Ch	20 Ch	40 Ch
Insertion loss (maximum) 200 GHz	dB	<1.1 (add or drop) <0.8 (other)	2.3	3.0	3.2	4.0	4.0	-
Insertion loss (maximum) 100 GHz multiplexer and demultiplexer	dB	<1.1 (add or drop) <0.8 (other)	-	3.2	-	-	-	4.5
Isolation (maximum)	dB	>30 (add or drop) >12 (other)	>30 (adjacent channels) >40 (nonadjacent channels)					
Dimensions								
Depth (maximum)	in. cm	6.26 15.9	6.26 15.9	6.26 15.9	6.26 15.9	6.26 15.9	6.26 15.9	11.5 29.2
Width	in. cm	1.15 2.9	1.15 2.9	2.3 5.8	3.45 8.7	3.45 8.7	4.60 11.7	19.0 48.3
Height	in. cm	4.0 10.2	4.0 10.2	4.0 10.2	4.0 10.2	4.0 10.2	4.0 10.2	1.75 or 3.50 4.4 or 8.8
Faceplate height	in. cm	5.1 13.0	5.1 13.0	5.1 13.0	5.1 13.0	5.1 13.0	5.1 13.0	

^{*} Single-channel OADM raw filter dimensions Ø 5.5 mm x 36 mm with 900 µm loose tube and with SC/APC connectors.

Table 2. General Specifications

Specification	Units	200 GHz Specifications	100 GHz Specifications
Channel bandwidth @ -0.5 dB	nm	$\lambda_c \pm 0.25$ (-5° to 65°C)	$\lambda_c \pm 0.125$ (-5° to 65°C)
Channel spacing	GHz	200	100
Polarization dependent loss (PDL)	dB	≤ 0.20 (-5° to 65°C)	≤ 0.25 (-5° to 65°C)
Polarization mode dispersion (PMD)	ps	≤ 0.15 (-5° to 65°C)	≤ 0.15 (-5° to 65°C)
Directivity	dB	≥ 55	≥ 55
Optical return loss	dB	≥ 45	≥ 45
Optical connector type		SC/APC adapters or LC/APC	SC/APC adapters or LC/APC
Environment Specifications			
Operating temperature range	°C	-40 to 65	-40 to 65
Storage temperature range	°C	-40 to 80	-40 to 80

Notes:

- Losses include input/output and common connector losses.
- Recommended for use in noncondensing environments only.
- Unless otherwise noted, specifications are based on measurements made in accordance with NCTA recommended practices for measurements made on cable systems using standard frequency assignments.

Warranty Information

Warranty information is available on Cisco.com at the [Product Warranties](#) page.

Ordering Information

To place an order, visit the [Cisco Ordering Home Page](#), and use the information provided in Tables 3 through 6. To download software, visit the [Cisco Platform Suite](#).

Ordering Information

Table 3. Multiplexer and Demultiplexer Components

Number of Channels (ITU Grid - 200 GHz Spacing)	LGX Module Width	Part Numbers Multiplexer and Demultiplexer
4 (std, ITU ch.21-27)	1 slot	4014316
4 (opt, ITU ch.43-49)	1 slot	4014317
8 (std or Red, ITU ch.21-35, dual test points)	2 slots	4006681
8 (opt, ITU ch.43-47)	2 slots	4014318
8 (Blue, ITU ch.45-59, dual test points)	2 slots	4006682
12 (ITU ch.21-43, dual test points)	3 slots	4014319
16 (ITU ch.21-51, dual test points)	3 slots	4006683
20 (ITU ch.21-59, dual test points)	4 slots	254606

Number of Channels (ITU Grid - 100 GHz Spacing)	LGX Module Width	Part Numbers Multiplexer and Demultiplexer
4 (ITU ch.20-23) DTP-UG-EXP-LA	1 slots	1030044
4 (ITU ch.23-27) DTP-UG-EXP-LA	1 slots	1030045
4 (ITU ch.28-31) DTP-UG-EXP-LA	1 slots	1030046
4 (ITU ch.32-35) DTP-UG-EXP-LA	1 slots	1030047
4 (ITU ch.36-39) DTP-UG-EXP-LA	1 slots	1030048
4 (ITU ch.40-43) DTP-UG-EXP-LA	1 slots	1030049
4 (ITU ch.44-47) DTP-UG-EXP-LA	1 slots	1030050
4 (ITU ch.48-51) DTP-UG-EXP-LA	1 slots	1030051
4 (ITU ch.52-55) DTP-UG-EXP-LA	1 slots	1030052
4 (ITU ch.56-59) DTP-UG-EXP-LA	1 slots	1030053
4 (ITU ch.20-23) SA	2 slots	4039119
4 (ITU ch.23-27) SA	2 slots	4039120
4 (ITU ch.28-31) SA	2 slots	4039121
4 (ITU ch.32-35) SA	2 slots	4039122
4 (ITU ch.36-39) SA	2 slots	4039123
4 (ITU ch.40-43) SA	2 slots	4039398
4 (ITU ch.44-47) SA	2 slots	4039399
4 (ITU ch.48-51) SA	2 slots	4039400
4 (ITU ch.52-55) SA	2 slots	4039401
4 (ITU ch.56-59) SA	2 slots	4039402

Number of Channels (ITU Grid - 100 GHz Spacing)	LGX Module Width	Part Numbers Multiplexer and Demultiplexer
8 (ITU ch.20-27) DTP-UG-EXP-LA	1 slots	1030034
8 (ITU ch.28-35) DTP-UG-EXP-LA	1 slots	1030035
8 (ITU ch.36-43) DTP-UG-EXP-LA	1 slots	1030036
8 (ITU ch.44-51) DTP-UG-EXP-LA	1 slots	1030037
8 (ITU ch.52-59) DTP-UG-EXP-LA	1 slots	1030038
8 (ITU ch.25-32) DTP-UG-EXP-LA	1 slots	1030179
8 (ITU ch.33-40) DTP-UG-EXP-LA	1 slots	1030180
8 (ITU ch.16-23) Dual-DTP-LP	2 slots	4040757
8 (ITU ch.25-32) Dual-DTP-LP	2 slots	4040758
8 (ITU ch.34-41) Dual-DTP-LP	2 slots	4040759
8 (ITU ch.43-50) Dual-DTP-LP	2 slots	4040760
8 (ITU ch.52-59) Dual-DTP-LP	2 slots	4040761
8 (ITU ch.16-23) SA	2 slots	4004352
8 (ITU ch.25-32) SA	2 slots	4004351
8 (ITU ch.34-41) SA	2 slots	4004350
8 (ITU ch.43-50) SA	2 slots	4004349
8 (ITU ch.52-59) SA	2 slots	4004348
8 (ITU ch.20-27) SA	2 slots	4030116
8 (ITU ch.28-35) SA	2 slots	4030117

Number of Channels (ITU Grid - 100 GHz Spacing)	LGX Module Width	Part Numbers Multiplexer and Demultiplexer
8 (ITU ch.36-43) SA	2 slots	4030118
8 (ITU ch.44-51) SA	2 slots	4030119
8 (ITU ch.16-23) DTP-SA	2 slots	4036782
8 (ITU ch.25-32) DTP-SA	2 slots	4036783
8 (ITU ch.34-41) DTP SA	2 slots	4036784
8 (ITU ch.43-50) DTP SA	2 slots	4036785
8 (ITU ch.52-59) DTP SA	2 slots	4036786
8 (ITU ch 25-32) DTP EXP SA	2 slots	4041315
8 (ITU ch 34-41) DTP EXP SA	2 slots	4041316

Number of Channels (ITU Grid - 100 GHz Spacing)	LGX Module Width	Part Numbers Multiplexer and Demultiplexer
12 (ITU ch.50-61) DTP-UG-EXP-LA	1 slots	1030065
16 (ITU ch.25-40) DTP-UG-EXP-LA	2 slots	1030017
20 (ITU ch.20-39) DTP-UG-EXP-LA	2 slots	1030016
20 (ITU ch.40-59) DTP-UG-EXP-LA	2 slots	1030031
20 (ITU ch.20-39) DTP-SA	4 slots	4036787
20 (ITU ch.40-59) DTP-SA	4 slots	4037364

Number of Channels (ITU Grid - 100 GHz Spacing)	FOSC B-Basket	Part Numbers Multiplexer and Demultiplexer
4 (ITU ch.20-23) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030054
4 (ITU ch.23-27) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030055
4 (ITU ch.28-31) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030056
4 (ITU ch.32-35) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030057
4 (ITU ch.36-39) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030058
4 (ITU ch.40-43) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030059
4 (ITU ch.44-47) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030060
4 (ITU ch.48-51) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030061
4 (ITU ch.52-55) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030062
4 (ITU ch.56-59) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030063
8 (ITU ch 20-27) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030039
8 (ITU ch 28-35) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030040
8 (ITU ch 36-43) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030041
8 (ITU ch 44-51) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030042
8 (ITU ch 52-59) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030043
8 (ITU ch 25-32) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030181
8 (ITU ch 33-40) DTP-UG-EXP-SA-NA	Dual DWDM in one FOSC	1030182
12 (ITU ch 50-61) DTP-UG-EXP-SA-NA	Single DWDM in one FOSC	1030066
16 (ITU ch 25-40) DTP-UG-EXP-SA-NA	Single DWDM in one FOSC	1030064
20 (ITU ch 20-39) DTP-UG-EXP-SA-NA	Single DWDM in one FOSC	1030032

Number of Channels (ITU Grid - 100 GHz Spacing)	FOSC B-Basket	Part Numbers Multiplexer and Demultiplexer
20 (ITU ch 40-59) DTP-UG-EXP-SA-NA	Single DWDM in one FOSC	1030033
40 (ITU ch 20-59) DTP-UG-EXP-SA-NA	Single DWDM in one FOSC	1030178

Number of Channels (ITU Grid - 100 GHz Spacing)	Cassette	Part Numbers Multiplexer and Demultiplexer
4 (ITU ch.20-23) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030309
4 (ITU ch.23-27) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030310
4 (ITU ch.28-31) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030311
4 (ITU ch.32-35) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030312
4 (ITU ch.36-39) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030313
4 (ITU ch.40-43) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030314
4 (ITU ch.44-47) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030315
4 (ITU ch.48-51) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030316
4 (ITU ch.52-55) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030317
4 (ITU ch.56-59) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030318
8 (ITU ch 20-27) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030319
8 (ITU ch 28-35) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030320
8 (ITU ch 36-43) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030321
8 (ITU ch 44-51) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030322
8 (ITU ch 52-59) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030323
8 (ITU ch 25-32) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030324
8 (ITU ch 33-40) DTP-UG-EXP-SA-NA	Single DWDM in one Cassette	1030325

Number of Channels (ITU Grid - 100 GHz Spacing)	Rack Unit Height	Part Numbers Multiplexer and Demultiplexer
40 (ITU ch.20-59, dual test points, SC/APC)	2 RU	4000698
40 (ITU ch.16-59, skips 24, 33, 42, 51, LC)	1 RU	4004354
40 (ITU ch 20-59,DTP-UG-EXP-LA)	1 RU	1030030

Table 4. OADM with DWDM

Description (100 GHz)	Part Number	Description	Part Number
OADM,LGX-DWDM-ITU-16-SA	4003543	OADM,LGX-DWDM-ITU-38-SA	4003565
OADM,LGX-DWDM-ITU-17-SA	4003544	OADM,LGX-DWDM-ITU-39-SA	4003565
OADM,LGX-DWDM-ITU-18-SA	4003545	OADM,LGX-DWDM-ITU-40-SA	4003565
OADM,LGX-DWDM-ITU-19-SA	4003546	OADM,LGX-DWDM-ITU-41-SA	4003565
OADM,LGX-DWDM-ITU-20-SA	4003547	OADM,LGX-DWDM-ITU-42-SA	4003565
OADM,LGX-DWDM-ITU-21-SA	4003548	OADM,LGX-DWDM-ITU-43-SA	4003570
OADM,LGX-DWDM-ITU-22-SA	4003549	OADM,LGX-DWDM-ITU-44-SA	4003571
OADM,LGX-DWDM-ITU-23-SA	4003550	OADM,LGX-DWDM-ITU-45-SA	4003572
OADM,LGX-DWDM-ITU-24-SA	4003551	OADM,LGX-DWDM-ITU-46-SA	4003573
OADM,LGX-DWDM-ITU-25-SA	4003552	OADM,LGX-DWDM-ITU-47-SA	4003574

Description (100 GHz)	Part Number	Description	Part Number
OADM,LGX-DWDM-ITU-26-SA	4003553	OADM,LGX-DWDM-ITU-48-SA	4003575
OADM,LGX-DWDM-ITU-27-SA	4003554	OADM,LGX-DWDM-ITU-49-SA	4003576
OADM,LGX-DWDM-ITU-28-SA	4003555	OADM,LGX-DWDM-ITU-50-SA	4003577
OADM,LGX-DWDM-ITU-29-SA	4003556	OADM,LGX-DWDM-ITU-51-SA	4003578
OADM,LGX-DWDM-ITU-30-SA	4003557	OADM,LGX-DWDM-ITU-52-SA	4003579
OADM,LGX-DWDM-ITU-31-SA	4003558	OADM,LGX-DWDM-ITU-53-SA	4003580
OADM,LGX-DWDM-ITU-32-SA	4003559	OADM,LGX-DWDM-ITU-54-SA	4003581
OADM,LGX-DWDM-ITU-33-SA	4003560	OADM,LGX-DWDM-ITU-55-SA	4003582
OADM,LGX-DWDM-ITU-34-SA	4003561	OADM,LGX-DWDM-ITU-56-SA	4003583
OADM,LGX-DWDM-ITU-35-SA	4003562	OADM,LGX-DWDM-ITU-57-SA	4003584
OADM,LGX-DWDM-ITU-36-SA	4003563	OADM,LGX-DWDM-ITU-58-SA	4003585
OADM,LGX-DWDM-ITU-37-SA	4003564	OADM,LGX-DWDM-ITU-59-SA	4003586

Table 5. OADM Filter

Description (200 GHz)	Part Number
OADM, Filter, DWDM-ITU-18-SA	4033333

Description (100 GHz)	Part Number	Description	Part Number
OADM, Filter, DWDM-ITU-20-SA	4043801	OADM, Filter, DWDM-ITU-40-SA	4043821
OADM, Filter, DWDM-ITU-21-SA	4043802	OADM, Filter, DWDM-ITU-41-SA	4043822
OADM, Filter, DWDM-ITU-22-SA	4043803	OADM, Filter, DWDM-ITU-42-SA	4043823
OADM, Filter, DWDM-ITU-23-SA	4043804	OADM, Filter, DWDM-ITU-43-SA	4043824
OADM, Filter, DWDM-ITU-24-SA	4043805	OADM, Filter, DWDM-ITU-44-SA	4043825
OADM, Filter, DWDM-ITU-25-SA	4043806	OADM, Filter, DWDM-ITU-45-SA	4043826
OADM, Filter, DWDM-ITU-26-SA	4043807	OADM, Filter, DWDM-ITU-46-SA	4043827
OADM, Filter, DWDM-ITU-27-SA	4043808	OADM, Filter, DWDM-ITU-47-SA	4043828
OADM, Filter, DWDM-ITU-28-SA	4043809	OADM, Filter, DWDM-ITU-48-SA	4043829
OADM, Filter, DWDM-ITU-29-SA	4043810	OADM, Filter, DWDM-ITU-49-SA	4043830
OADM, Filter, DWDM-ITU-30-SA	4043811	OADM, Filter, DWDM-ITU-50-SA	4043831
OADM, Filter, DWDM-ITU-31-SA	4043812	OADM, Filter, DWDM-ITU-51-SA	4043832
OADM, Filter, DWDM-ITU-32-SA	4043813	OADM, Filter, DWDM-ITU-52-SA	4043833
OADM, Filter, DWDM-ITU-33-SA	4043814	OADM, Filter, DWDM-ITU-53-SA	4043834
OADM, Filter, DWDM-ITU-34-SA	4043815	OADM, Filter, DWDM-ITU-54-SA	4043835
OADM, Filter, DWDM-ITU-35-SA	4043816	OADM, Filter, DWDM-ITU-55-SA	4043836
OADM, Filter, DWDM-ITU-36-SA	4043817	OADM, Filter, DWDM-ITU-56-SA	4043837
OADM, Filter, DWDM-ITU-37-SA	4043818	OADM, Filter, DWDM-ITU-57-SA	4043838
OADM, Filter, DWDM-ITU-38-SA	4043819	OADM, Filter, DWDM-ITU-58-SA	4043839
OADM, Filter, DWDM-ITU-39-SA	4043820	OADM, Filter, DWDM-ITU-59-SA	4043840

Table 6. Related Optical Passives Components

Related Optical Passive Components	Part Number
DataLinxs Patch Enclosure (2 RU, LGX-Compatible, 24-position, unloaded)	750180
DataLinxs Patch Enclosure (3 RU, LGX-Compatible, 48-position, unloaded)	750181
DataLinxs Patch Enclosure (4 RU, LGX-Compatible, 72-position, unloaded)	750182
Patch Plate (LGX-Compatible, 6-port, SC/APC adapters)	750189
Prisma Singlemode Multiband Couplers/Splitters (LGX-Compatible)	See Data Sheet 7001406
Prisma Fixed Optical Attenuators	See Data Sheet 7002298

Table 7. ITU Wavelength Map

ITU Channel	Wavelength (nm)		Number of Wavelengths						
	200 GHz Spacing	100 GHz Spacing	40 ch	20 ch	16 ch	12 ch	8 ch 100G No Skip	8 ch 100G Skip 1	4 ch 100G No Skip
16		1564.68						X	
17	1563.86							X	
18		1563.05						X	
19	1562.23							X	
20		1561.42	X	X			X	X	X
21	1560.61		X	X			X	X	X
22		1559.79	X	X			X	X	X
23	1558.98		X	X			X	X	X
24		1558.17	X	X			X		X
25	1557.36		X	X	X		X	X	X
26		1556.55	X	X	X		X	X	X
27	1555.75		X	X	X		X	X	X
28		1554.94	X	X	X		X	X	X
29	1554.13		X	X	X		X	X	X
30		1553.33	X	X	X		X	X	X
31	1552.52		X	X	X		X	X	X
32		1551.72	X	X	X		X	X	X
33	1550.92		X	X	X		X		X
34		1550.12	X	X	X		X	X	X
35	1549.32		X	X	X		X	X	X
36		1548.51	X	X	X		X	X	X
37	1547.72		X	X	X		X	X	X
38		1546.92	X	X	X		X	X	X
39	1546.12		X	X	X		X	X	X
40		1545.32	X	X	X		X	X	X
41	1544.53		X	X			X	X	X
42		1543.73	X	X			X		X
43	1542.94		X	X			X	X	X
44		1542.14	X	X			X	X	X
45	1541.35		X	X			X	X	X
46		1540.56	X	X			X	X	X
47	1539.77		X	X			X	X	X
48		1538.98	X	X			X	X	X
49	1538.19		X	X			X	X	X
50		1537.40	X	X		X	X	X	X
51	1536.61		X	X		X	X		X

ITU Channel	Wavelength (nm)		Number of Wavelengths						
	200 GHz Spacing	100 GHz Spacing	40 ch	20 ch	16 ch	12 ch	8 ch 100G No Skip	8 ch 100G Skip 1	4 ch 100G No Skip
52		1535.82	X	X			X	X	X
53	1535.04		X	X			X	X	X
54		1534.25	X	X			X	X	X
55	1533.47		X	X			X	X	X
56		1532.68	X	X			X	X	X
57	1531.90		X	X			X	X	X
58		1531.12	X	X			X	X	X
59	1530.33		X	X			X	X	X
60		1529.55					X		
61	1528.77						X		

Cisco Services

Cisco Services help networks, applications, and the people who use them work better together. Today, the network is a strategic platform in a world that demands better integration between people, information, and ideas. The network works better when services, together with products, create solutions aligned with business needs and opportunities. The unique Cisco lifecycle approach to services defines the activities that are needed at each phase of the network lifecycle to help ensure service excellence. With collaborative delivery methods that join Cisco experts, our skilled network of partners, and our customers, we achieve the best results.

For More Information

Cisco Prisma DWDM Passives products include some of the industry's most complete range of high-performance components. For additional information, please go to:

<http://www.cisco.com/en/US/products/ps8981/index.html>.



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