

Optical Passives (OSP)

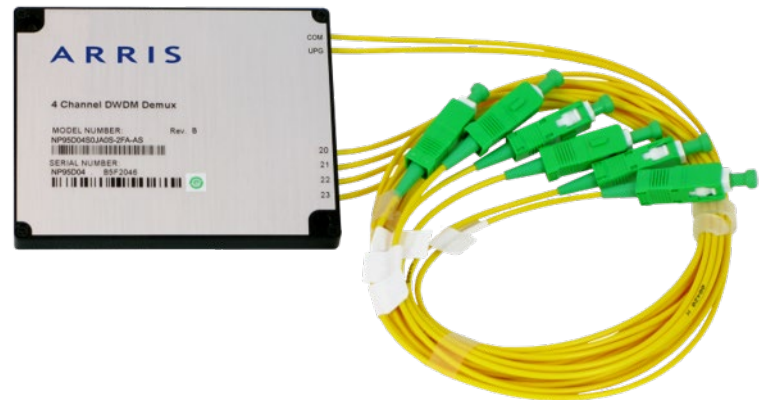
NP95DxxS

DWDM Demux Field Passives

(4 Channels on 100 GHz-speed ITU Grid)

FEATURES

- 4- and 16-channel optical demux modules in field hardened enclosures
- Includes cascade port options (on 4-channel models only) for daisy-chaining of multiple modules
- High optical isolation
- Mux and demux pairs optimized for minimum combined insertion loss across all channels
- Options available for fiber and connector types
- Epoxy-free on optical path

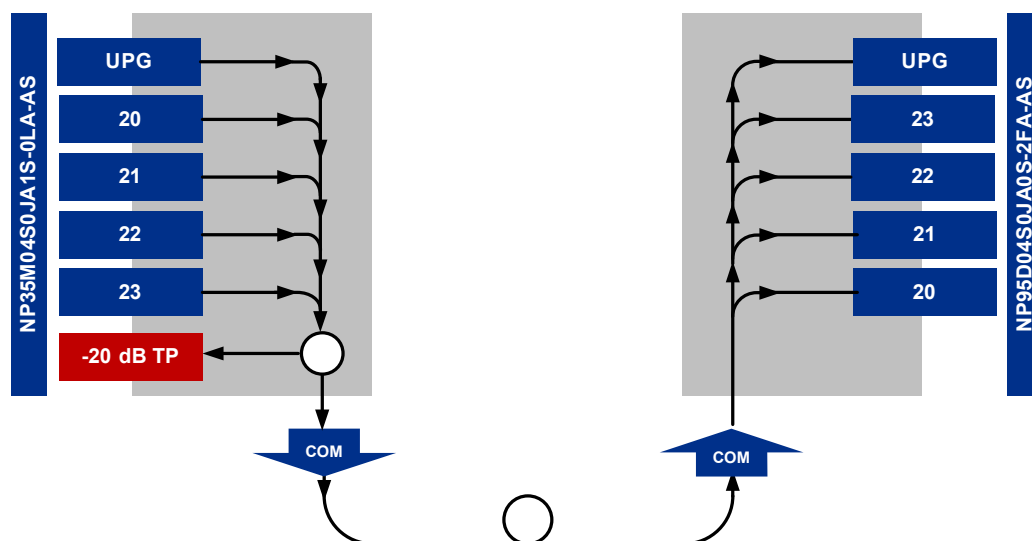


PRODUCT OVERVIEW

ARRIS NP95DxxS series 4-channel and 16-channel DWDM de-multiplexers facilitate DWDM architectures. DWDM technology can dramatically increase network capacity without requiring additional fiber be deployed for super-trunking or narrowcasting applications.

ARRIS supports DWDM architectures with a variety of products having center frequency spacing on the standard DWDM ITU Grid (ITU-T G.694.1) for 40 channels from Channel 20 to Channel 59.

These ruggedized modules have been designed for use in an outdoor environment with a temperature range of -40° to $+85^{\circ}\text{C}$.



SPECIFICATIONS

Characteristics	Specification	
Physical		
	NP95D04S0xA0S-2FA	NP95D16S04Z01-1GA
Dimensions (without connectors)	3.78" L x 3.07" W x 0.31" H (9.6 cm x 7.8 cm x 0.8 cm)	3.78" L x 3.07" W x 0.51" H (9.6 cm x 7.8 cm x 1.3 cm)
Weight	1.0 lbs (0.45 kg)	1.0 lbs (0.45 kg)
Environmental		
Operating Temperature Range	-40° to +85°C (-40° to +185°F)	
Storage Temperature Range	-40° to +85°C (-40° to +185°F)	
Humidity	5% to 95% non-condensing	
Optical (all models)		
Return loss	45 dB	
Polarization dependent loss, max	0.25 dB	
Ripple within passband	0.5 dB	
Channel spacing	100 GHz	
Passband @ 0.5 dB	<ul style="list-style-type: none"> COM to DWDM Channel output: ± 0.125 nm UPG to COM: 1527.22-1564.68 (available only for NP95D04's) 	
Isolation, adjacent channel, min	30 dB	
Isolation, non-adjacent channel, min	45 dB	
Power handling, any input port, max	21.8 dBm	
	NP95D04S0xA0S-2FA	NP95D16S04Z01-1GA
Insertion losses, max ¹		
UPG to COM	1.3 dB	N/A
COM to DWDM channel output	1.6 dB	4.5 dB
Paired insertion loss ²	2.6 dB	5.6 dB
Uniformity, max ¹	2 dB	3.5 dB
Optical Interface		
Optical connectors	See Ordering Information for available options.	
Optical ports	<ul style="list-style-type: none"> COM 4 DWDM channel outputs UPG (for cascading with the next demux; available only in NP95D04's) 	
ITU Channel Plans		
	See Ordering Information for available options.	

NOTES:

- Including connectors
- Paired insertion loss from DWDM channel input of mux to DWDM channel output of demux when combined with 4-ch mux module

ORDERING INFORMATION



- Channel count (04 = 4 channels; 16 = 16 channels)
- Channel group (J, K, L, M, N, P, R, S, T, U or 4) (See tables below for ITU channels in each channel group.)
- UPG port option [A = with UPG port (available only in NP95D04's; Z = no UPG port (available only in NP95D16's)]
- Filter grade (S = suitable for base-band digital or externally modulated systems; 1 = suitable for systems with 30 or fewer analog channels in their RF payloads)
- Fiber type [1 = 0.9-mm; 2 = 1.6-mm (unavailable for NP96D16S's)]
- Package (F = F-case; G = G-case) (See Specifications section for the dimensions of each.)
- Optical connector option [00 = No connector (applicable only to $\gamma = 1$); AS = SC/APC (applicable only to NP95D04S0xA0S-2FA's and NP95D16S04Z01-1GA); AL = LC/APC (available only in NP95D16S04Z01-1GA)]

Channel Group	ITU Channel #	Wavelength (nm)	Optical frequency (THz)
J	20	1561.419	192.0
	21	1560.606	192.1
	22	1559.794	192.2
	23	1558.983	192.3
K	24	1558.173	192.4
	25	1557.363	192.5
	26	1556.555	192.6
	27	1555.747	192.7
L	28	1554.940	192.8
	29	1554.134	192.9
	30	1553.329	193.0
M	31	1552.524	193.1
	32	1551.721	193.2
	33	1550.918	193.3
	34	1550.116	193.4
	35	1549.315	193.5
N	36	1548.515	193.6
	37	1547.715	193.7
	38	1546.917	193.8
	39	1546.119	193.9

Channel Group	ITU Channel #	Wavelength (nm)	Optical frequency (THz)
P	40	1545.322	194.0
	41	1544.526	194.1
	42	1543.730	194.2
	43	1542.936	194.3
R	44	1542.142	194.4
	45	1541.349	194.5
	46	1540.557	194.6
	47	1539.766	194.7
S	48	1538.976	194.8
	49	1538.186	194.9
	50	1537.397	195.0
T	51	1536.609	195.1
	52	1535.822	195.2
	53	1535.036	195.3
	54	1534.250	195.4
	55	1533.465	195.5
U	56	1532.681	195.6
	57	1531.898	195.7
	58	1531.116	195.8
	59	1530.334	195.9

Channel Group	ITU Channel #	Wavelength (nm)	Optical frequency (THz)
4	20	1561.419	192.0
	21	1560.606	192.1
	24	1558.173	192.4
	29	1554.134	192.9
	35	1549.315	193.5
	42	1543.730	194.2
	52	1535.822	195.2
	54	1534.250	195.4
	23	1558.983	192.3
	33	1550.918	193.3
	44	1542.142	194.4
	47	1539.766	194.7
	51	1536.609	195.1
	57	1531.898	195.7
	58	1531.116	195.8
	59	1530.334	195.9

RELATED PRODUCTS

Optical Transmitters	Optical Passives
Digital Return	Optical Patch Cords
Optical Nodes	Installation Services

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

Note: Specifications are subject to change without notice.

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OSP-NP95DxxS