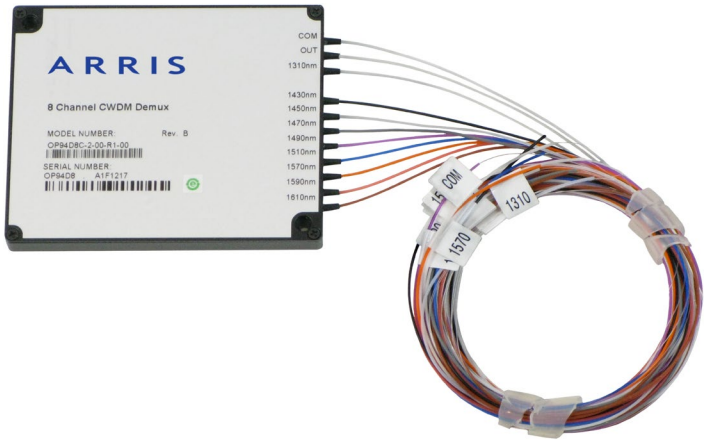
Optical Passives (OSP)

OP94D8C

8-channel CWDM Demultiplexer Field Passives

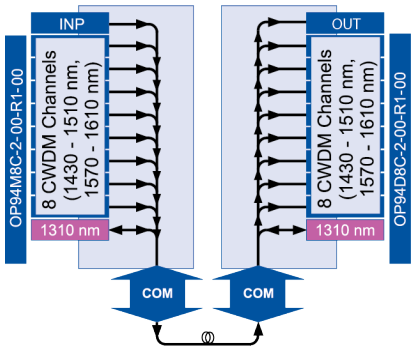
FEATURES

- Flat and wide operating passband on CWDM ITU grid (20 nm spacing)
- High channel isolation to minimize crosstalk
- Low polarization dependent loss (PDL)
- Operating temperature range –40° to +85°C
- Telcordia GR-1209 and GR-1221 qualified, providing excellent environmental and mechanical stability
- Epoxy-free on optical path
- Optional integrated 1310 nm combiner/splitter



PRODUCT OVERVIEW

ARRIS's OP94D8C series 8-channel CWDM field passives are designed to demultiplex 8 CWDM ITU-grid optical wavelengths, with individual wavelengths ranging from 1430 to 1510 nm and from 1570 to 1610 nm (with 20 nm spacing between adjacent channels). Two different models are offered, with and without an integrated 1310 nm combiner/splitter. Both of these ruggedized modules have been designed for use in an outdoor environment within a temperature range of –40° to +85°C.



SPECIFICATIONS

Characteristics	Specification	
Physical		
Dimensions	3.8" L x 3.1" W x 0.3" H (9.6 cm x 7.8 cm x 0.8 cm)	
Weight	1.0 lb (0.5 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 Interface		
Optical connectors	none (See Ordering Information)	
Model OP94D8C-1-00-R1-00 (8-channel demux module)	• INP (input from fiber network) • CWDM OUT (output to cascaded group) • Ch. *xxxx* OUT (8 channel drops)	
Model OP94D8C-2-00-R1-00 (8-channel demux module with 1310 splitter)	• COM (input from fiber network, I/O to/from network for 1310) • CWDM OUT (output to cascaded group) • Ch. *xxxx* OUT (8 channel drops) • 1310 (input/output to/from fiber network for 1310 nm)	
Center wavelengths of de-multiplexed channels	1430, 1450, 1470, 1490, 1510, 1570, 1590, 1610 nm	
Wavelength passband between OUT (cascade output) and COM ports	1423–1617 nm (with eight 13-nm-wide notches at 1430, 1450, 1470, 1490, 1510, 1570, 1590, 1610 nm)	
Optical		
Insertion losses, max (dB)	**OP94D8C-1-00-R1-00**	**OP94D8C-2-00-R1-00**
INP to Ch. *xxxx* OUT	2.3	N/A
COM to Ch. xxxx OUT	N/A	3.0
1310 to COM	N/A	1.3
Paired insertion loss[1]	3.7	4.4
Channel isolation, min (dB)		
Adjacent channels	35	35
Non-adjacent channels	45	45
Directivity, min (dB)	55	55
Return loss, min	45 dB	45 dB
Passband @ 0.15 dB	± 6.5 nm	± 6.5 nm
Ripple within passband	0.15 dB	0.15 dB
Polarization dependent loss, max	0.15 dB (< 0.1 dB typ)	0.15 dB (< 0.1 dB typ)
Passband for 1310 @ 0.5 dB	N/A	1263.5–1357.5 nm
Power handling, max (any input port)	21.8 dBm	21.8 dBm

NOTE:
1. Paired insertion loss when combined with corresponding applicable 8-wavelength mux module (from Ch. *xxxx* INP to Ch. *xxxx* OUT)

ORDERING INFORMATION

O	P	9	4	D	8	C	–	*	–	0	0	–	*	*	–	*	*

8-channel CWDM Demultiplexer, Field Passive

*** = 1310 nm I/O Port (1 = not present, 2 = present)**

(Reserved Fields)

Packaging, Fiber, and Connector Type
R1-00 = Ruggedized package with 1.5 meter pigtail of 900 µm tight buffered fiber and no connectors

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

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