

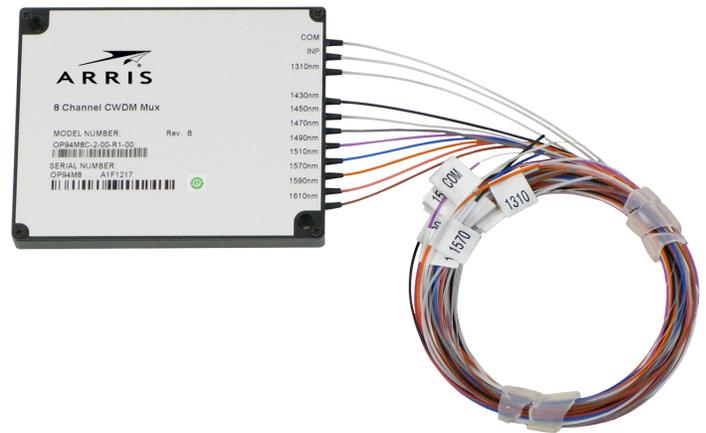
Optical Passives (OSP)

OP94M8C

8-channel CWDM Multiplexer Field Passives

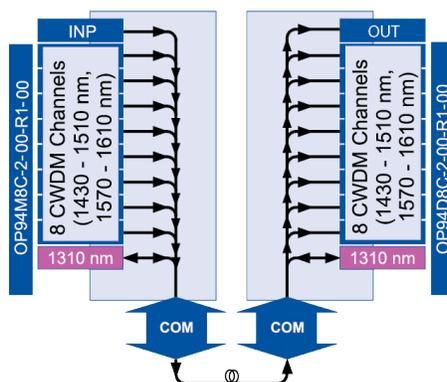
FEATURES

- Flat and wide operating passband on CWDM ITU grid (20 nm spacing)
- Low polarization dependent loss (PDL)
- Operating temperature range -40° to $+85^{\circ}\text{C}$
- 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 OP94M8C series 8-channel CWDM field passives are designed to multiplex 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 $+85^{\circ}\text{C}$.



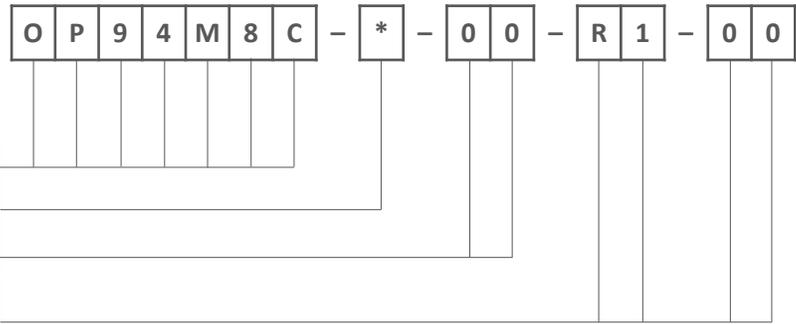
SPECIFICATIONS

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 OP94M8C-1-00-R1-00 (8-channel mux module)	<ul style="list-style-type: none"> • COM (output to fiber network) • INP (input for cascaded group) • Ch. xxxx IN (8 channel inputs)
Model OP94M8C-2-00-R1-00 (8-channel mux module with 1310 splitter)	<ul style="list-style-type: none"> • COM (output to fiber network, I/O to/from network for 1310) • INP (input for cascaded group) • Ch. xxxx IN (8 channel inputs) • 1310 (input/output to/from fiber network for 1310 nm)
Center wavelengths of multiplexed channels	1430, 1450, 1470, 1490, 1510, 1570, 1590, 1610 nm
Wavelength passband between INP (cascade input) 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)	OP94M8C-1-00-R1-00 OP94M8C-2-00-R1-00
Ch. xxxx IN to COM	2.5 2.7
INP to COM	2.0 2.3
1310 to COM	N/A 0.9
Paired insertion loss ¹	3.3 3.9
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 OP94D8C demux module (from Ch. xxxx INP to Ch. xxxx OUT)

ORDERING INFORMATION



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

Note: Specifications are subject to change without notice.

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