

Optical Passives (OSP)

OP95M8x, OP95D8x

DWDM Mux and Demux Field Passives

FEATURES

- 8-channel optical mux and demux modules in field hardened enclosures
- Channels spaced on standard 100-GHz-spaced DWDM ITU grid
- Flat-top passband
- High optical isolation
- Supports both forward and return path transmission of analog and digital signals
- 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

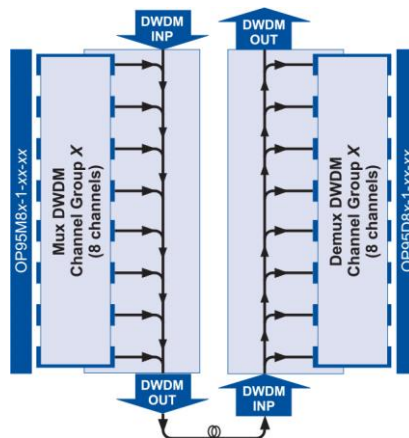


PRODUCT OVERVIEW

ARRIS's OP95M8x and OP95D8x series 8-channel DWDM multiplexers and demultiplexers 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). In many of ARRIS's products, these frequencies are logically partitioned into groups of 4, 8, or 16 channels (with letters used to designate channel groups). That concept is employed in the OP95M8x and OP95D8x series of 8-channel mux and demux modules, where five channel group configurations are available for 40 channels (20 to 59) on a DWDM grid with 100 GHz channel spacing.

These ruggedized modules have been designed for use in an outdoor environment with a temperature range of -40° to +85°C.



SPECIFICATIONS

Characteristics	Specification	
Physical		
Dimensions	3.78" L x 3.07" W x 0.31" H (9.6 cm x 7.8 cm x 0.8 cm)	
Weight	1.0 lb (0.45 kg)	
Environmental		
Operating Temperature Range	-40°C to +85°C (-40°F to +185°F)	
Storage Temperature Range	-40°C to +85°C (-40°F to +185°F)	
Humidity	5% to 95% non-condensing	
Optical		
Return loss, min	45 dB	
Polarization dependent loss, max	0.15 dB (< 0.1 dB typ)	
Insertion losses, max ¹ (dB)	Mux Modules OP95M8x-1-00-zz-zz	Demux Modules OP95D8x-1-00-zz-zz
Ch. yy INP to DWDM OUT	2.6	N/A
DWDM INP to DWDM OUT	2.2	2.2
DWDM INP to Ch. yy OUT	N/A	2.6
Paired insertion loss ²	3.2	3.2
Uniformity, max ¹ (dB)		
Module	1.5	1.5
Paired	1.0	1.0
Passband @ 0.5 dB (nm)		
Ch. yy INP to DWDM OUT	± 0.125	± 0.125
DWDM INP to DWDM OUT	See Note 3	See Note 3
Directivity, min (dB)	55	N/A
Isolation, adjacent channel, min (dB)	N/A	32
Isolation, non-adjacent channel, min (dB)	N/A	45
Power handling, any input port, max (dBm)	21.8	21.8
Ripple within passband	0.5 dB	0.5 dB
Channel spacing	100 GHz	100 GHz
Optical Interface		
Optical connectors	See Ordering Information for available options	
Model OP95M8x-1-00-zz-zz	<ul style="list-style-type: none"> • Ch. yy INP (8 channel add inputs for Channel Group x) • DWDM INP (input from previous mux in a cascade) • DWDM OUT (output to fiber network) 	
Model OP95D8x-1-00-zz-zz	<ul style="list-style-type: none"> • Ch. yy (8 channel drop outputs for Channel Group x) • DWDM INP (input from fiber network) • DWDM OUT (output to next demux in a cascade) 	

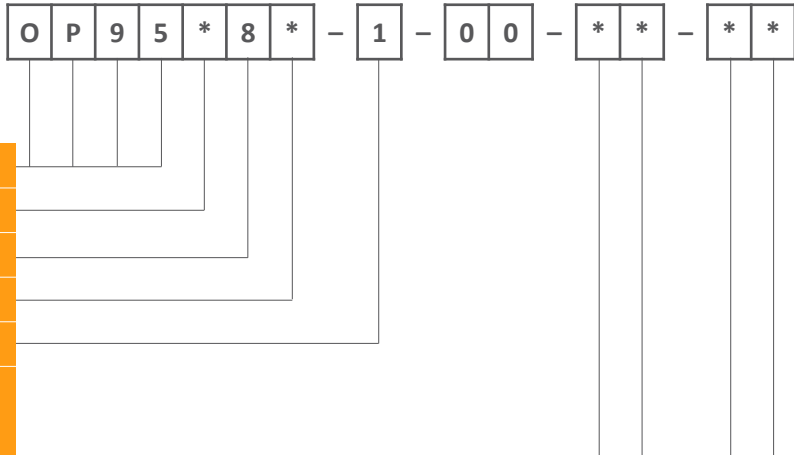
NOTES:

¹ Including connectors;

² Paired insertion loss when combined with 8-ch demux module from Ch. yy INP to Ch. yy OUT, and vice-versa;

³ Passes 1420-1620 nm with a notch at the channel add/drop band and WDL within ± 0.15 dB.

ORDERING INFORMATION



- DWDM Optical Field Passive
- * = Module Type (M = Mux, D = Demux)
- 8-channel Module
- * = DWDM ITU Channel Group (See Note.)
- (Reserved Field)
- **.** = Packaging, Fiber, and Connector Type (All ports are identically connectorized.)
- R1-00 = Ruggedized package with 1 meter pigtail of 900 μm tight buffered fiber and no connector
- R2-00 = Ruggedized package with 1 meter pigtail of 2 mm loose tube fiber and no connector
- R2-AS = Ruggedized package with 1 meter pigtail of 2 mm loose tube fiber and SC/APC connectors

Note:

8-channel mux and demux modules are available for Channel Groups K, M, P, S, and U on a 100 GHz-spaced ITU grid. Please refer to the ARRIS DWDM ITU Grid Channel Plan data sheet for a complete description of the channels included in these groups..

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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