

# Optical Passives (OSP)

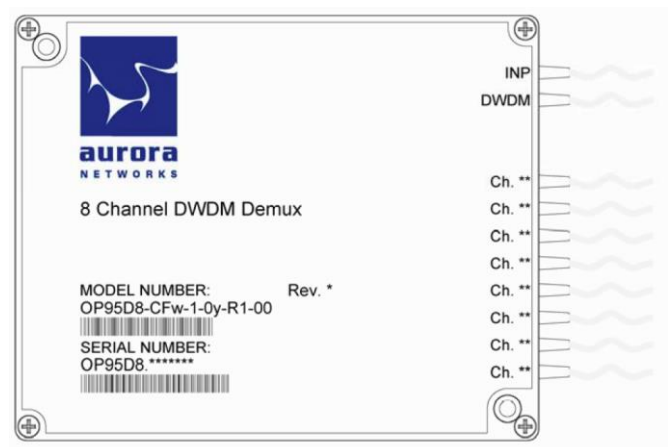
## OP95D8-CFx

### DWDM Demux Field Passives

### (8 Channels on 100 GHz-speed ITU Grid)

## FEATURES

- 8-channel optical demux modules in field hardened enclosures
- Includes cascade port for daisy-chaining of multiple modules
- Groups of channels specifically selected for use with HT354x and AT3545G series Full Spectrum DWDM - Transmitters
- Flat-top pass band
- 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

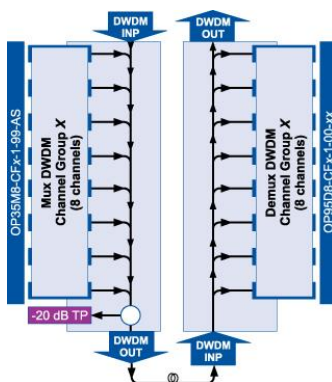


## PRODUCT OVERVIEW

ARRIS OP95D8-CFx series 8-channel DWDM 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) for 40 channels from Channel 20 to Channel 59. This particular group of 8-channel demux products are intended for use with ARRIS's HT354x and AT3545G Full Spectrum DWDM Transmitters and are available with two different combinations of eight DWDM channels each.

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



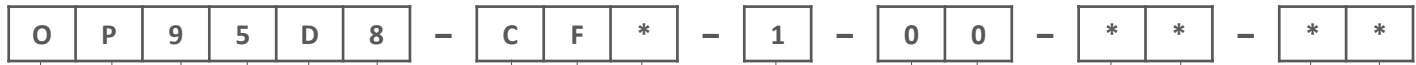
## SPECIFICATIONS

Characteristics	Specification
<b>Physical</b>	
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)
Weight	1.0 lbs (0.45 kg)
<b>Environmental</b>	
Operating Temperature Range	$-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $+185^{\circ}\text{F}$ )
Storage Temperature Range	$-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $+185^{\circ}\text{F}$ )
Humidity	5% to 95% non-condensing
<b>Optical (all models)</b>	
Return loss	45 dB
Polarization dependent loss, max	0.15 dB ( $< 0.1$ dB typ)
Ripple within passband	0.5 dB
Channel spacing	100 GHz
Insertion losses, max <sup>1</sup>	<ul style="list-style-type: none"> <li>DWDM INP to DWDM OUT: 2.2 dB</li> <li>DWDM INP to Ch yy OUT: 2.6 dB</li> <li>Paired insertion loss<sup>2</sup>: 3.2 dB</li> </ul>
Uniformity, max <sup>1</sup>	<ul style="list-style-type: none"> <li>Module: 1.5 dB</li> <li>Paired: 1.0 dB</li> </ul>
Passband @ 0.5 dB	<ul style="list-style-type: none"> <li>Ch yy INP to DWDM OUT: <math>\pm 0.12</math> nm</li> <li>DWDM INP to DWDM OUT: <i>See Note</i> <sup>3</sup></li> </ul>
Isolation, adjacent channel, min	32 dB
Isolation, non-adjacent channel, min	45 dB
Power handling, any input port, max	21.8 dBm
<b>Optical Interface</b>	
Optical connectors	<i>See Ordering Information for available options</i>
Model OP95D8-CFx-1-zz-zz (for x = 2 or 4)	<ul style="list-style-type: none"> <li>Ch yy (8 channel drop outputs for Custom Channel Group x)</li> <li>DWDM INP (input from fiber network or previous demux)</li> <li>DWDM OUT (output to next demux in a cascade)</li> </ul>
<b>ITU Channel Plans</b>	
ARRIS supports DWDM network architectures with a variety of products having 100 GHz center frequency spacing on the standard DWDM ITU Grid (ITU-T G.694.1).	
OP95D8-CFx-1-99-AS 8-channel Optical Demux Modules are available (for which outputs can be cascaded from one module to another) are available for the following custom channel groups	<ul style="list-style-type: none"> <li>x = 2 = CF2 = Chs 20, 21, 24, 29, 35, 42, 52, and 54</li> <li>x = 4 = CF4 = Chs 23, 33, 44, 47, 51, 57, 58, and 59</li> </ul>

**NOTES:**

- <sup>1</sup> Including connectors;
- <sup>2</sup> Paired insertion loss when combined with 8-ch mux module from Ch yy INP to Ch yy OUT;
- <sup>3</sup> Passes 1420-1620 nm with a notch at the channel add/drop band and WDL within  $\pm 0.15$  dB.

**ORDERING INFORMATION**



- DWDM Optical Field Passive
- D = Demux
- 8-channel Module
- CF\* = Custom DWDM ITU Channel Group Key (\* = 2 or 4)
- (Reserved Field)
- \*\*\_\* = Packaging, Fiber, and Connector Type  
(All ports are identically connectorized.)  
R1-00 = Ruggedized package with 1 meter pigtail of 900 mm tight buffered fiber and no connector  
R2-AS = Ruggedized package with 1 meter pigtail of 2 mm loose tube fiber and SC/APC 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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