

# Optical Passives (ISP) OP31M2D, OP31D2D 1310 nm/1550 nm Optical Mux and Demux Modules

### **FEATURES**

- Dual packaged pairs of 1310/1550 nm multiplexers and demultiplexers in a single module
- Supports both forward and return path transmission of analog and digital signals
- Mux and demux pairs optimized for minimum combined insertion loss
- SC/APC connectors ensure performance repeatability, compatibility and easy installation and maintenance
- Occupies one half-depth slot



## **PRODUCT OVERVIEW**

ARRIS OP31x2D family of 1310/1550 nm mux (and demux) units are provided as two independent multiplexers (and demultiplexers) in a single module and are designed to minimize the combined insertion loss of the multiplexing and demultiplexing process. Modules are provided with -20 dB test points.

Ask us about the complete Access Technologies Solutions portfolio:

Optical Passives-OP31M2D/D2D

**Fiber-Deep** 

DOCSIS<sup>®</sup> 3.1

Node Segmentation

HPON<sup>™</sup>/RFoG

FTTx



ARRIS' multipexers and demultiplexers are packaged in ARRIS's very compact half-depth module for mounting in the CH3000 or PF3000 chassis. The packaging concept for ARRIS's family of optical passives is similar to the well-recognized LGX package; and, although ARRIS's version of the LGX module is slightly narrower (for higher packaging density), it will also mount in any standard LGX chassis. ARRIS's implementation maintains the advantages of the LGX concept (which enables easy, snap-in installation) while providing higher packaging density, greater flexibility and scalability to the network operator. When fully loaded, ARRIS's CH3000 chassis holds 32 single-width, half-depth optical passive modules.

#### **SPECIFICATIONS**

Characteristics	Specification	
Physical		
Dimensions	6.5" D x 4.3" H x 1.0" W (3RU) (17 cm x 11 cm x 2.5 cm)	
Weight	0.8 lbs (0.36 kg)	
Environmental		
Operating temperature range (indoor)	-20° to +65°C (-4° to +149°F)	
Storage temperature range	-40° to +85°C (-40° to +185°F)	
Humidity	5% to 95% non-condensing	
Optical		
Optical connectors	SC/APC	
Connector identification (2 sets per module)	<ul> <li>OP31M2D-1-99-AS 1550 INP, 1310 INP, OUT, TP –20dB (tap from mux output)</li> <li>OP31D2D-1-99-AS INP, 1550 OUT, 1310 OUT, TP –20dB (tap from demux input)</li> </ul>	
Insertion loss <sup>1</sup> , max (dB)	OP31M2D-1-99-AS (Mux)	OP31D2D-1-99-AS (Demux)
1310 INP to OUT	0.5	N/A
1550 INP to OUT	0.5	N/A
INP to 1310 OUT	N/A	1.2
INP to 1550 OUT	N/A	1.2
Pair uniformity <sup>1</sup> , max (dB)	0.3	0.4
Passband, min (nm)	40 <sup>2</sup>	60 <sup>3</sup>
Directivity (dB)	60	55
Return loss, min (dB)	45	50
Input power handling, max (dBm)	27	25
Isolation, min (dB)	N/A	45
NOTES:		

<sup>1</sup> Including connector

 $^2$  1550 nm  $\pm$  20 nm, 1310 nm  $\pm$  45 nm

 $^{\rm 3}$  1550 nm ± 30 nm, 1310 nm ± 45 nm

Ask us about the complete Access Technologies Solutions portfolio:

Optical Passives-OP31M2D/D2D

**Fiber-Deep** 

DOCSIS<sup>®</sup> 3.1

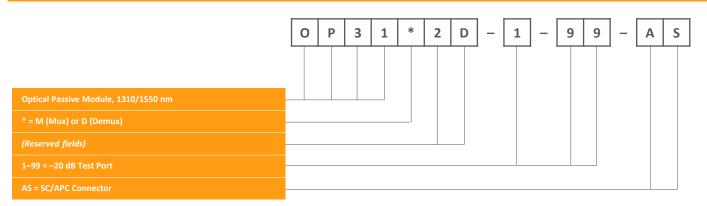
**Node Segmentation** 

HPON<sup>™</sup>/RFoG

FTTx







#### RELATED PRODUCTS

CH3000 chassis

S PF3000 chassis

LGX chassis

### **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.

**Copyright Statement:** ©ARRIS Enterprises, LLC, 2016. All rights reserved. No part of this publication may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from ARRIS Enterprises, LLC ("ARRIS"). ARRIS reserves the right to revise this publication and to make changes in content from time to time without obligation on the part of ARRIS to provide notification of such revision or change. ARRIS and the ARRIS logo are registered trademarks of ARRIS Enterprises, LLC. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks or the names of their products. ARRIS disclaims proprietary interest in the marks and names of others. The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice.

87-10134-RevG\_OP31M2D-D2D\_1310-1550-MuxDemux

07/2016 ECO10405

Optical Passives-OP31M2D/D2D

Ask us about the complete Access Technologies Solutions portfolio:

DOCSIS<sup>®</sup> 3.1

**Node Segmentation** 

HPON<sup>™</sup>/RFoG

FTTx