



FEATURES

- Designed for use with uncooled lasers based on 20 nm channel spacing
- Flat and wide operating passband on CWDM ITU grid (20 nm spacing)
- High channel isolation to minimize crosstalk
- Low polarization dependent loss (PDL)
- Telcordia GR-1209 and GR-1221 qualified, providing excellent environmental and mechanical stability
- Optional integrated 1310 nm combiner/splitter
- Optional line monitoring tap
- Occupies two half-depth slots
- 1310 nm can act as cascade port



PRODUCT OVERVIEW

ARRIS OP34M10S Series 10-channel CWDM multiplexers are designed to multiplex 10 CWDM ITU-grid optical wavelengths onto one fiber output, with the 10 individual wavelengths ranging from 1430 to 1610 nm (with 20 nm spacing between channels).

 $\ensuremath{\mathbb{C}}$ 2018 ARRIS Enterprises, LLC. All rights reserved.

Ask us about the complete Access Technologies Solutions portfolio:

ISP-OP34M10S

Fiber-Deep

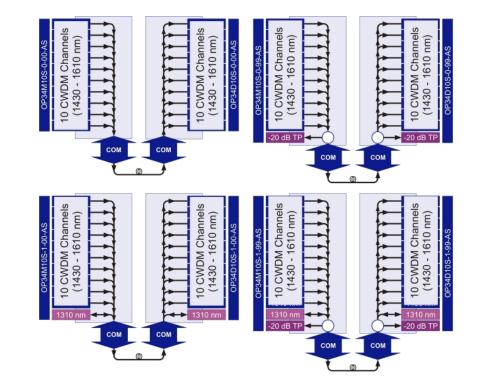
DOCSIS[®] 3.1

Node Segmentation

HPON[™]/RFoG

FTTx





SPECIFICATIONS

SPECIFICATIONS		
Characteristics	Specification	
Physical		
Dimensions	6.5" D x 4.3" H x 2.0" W (3RU) (16.5 cm x 11 cm x 5.0 cm)	
Weight	2.5 lbs (1.1 kg)	
Environmental		
Operating temperature range	-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 (all models)		
Channel spacing	20 nm	
Pass band for CWDM channel port @ -0.15 dBc (nm)	13	
Pass band for 1310-nm input (available only in OP34M10S-1) (nm)	1263.5-1357.5	
CWDM directivity, min (dB)	55	
1310-nm bypass directivity, min (dB)	65	
COM-to-1310-nm bypass isolation, min (dB)	60	
Return loss, min	45 dB	
Polarization dependent loss, max	0.15 dB (< 0.1 dB typ)	
Ripple within passband	0.5 dB	
Power handling, max (any input port)	21.8 dBm	
Optical Interface		
Optical connectors	SC/APC	
Model OP34M10S-0-00-AS	COM (output to fiber network)	
	• Ch xxxx INP (10 channels added for xxxx = 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 and 1610 nm)	
Model OP34M10S-1-00-AS	 COM (output to fiber network; I/O to/from fiber network for 1310) 	
	• 1310 (input/output to/from fiber network for 1310 nm)	
	• Ch. xxxx INP (10 channels added for xxxx = 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 and 1610 nm)	
Model OP34M10S-0-99-AS	 COM (output to fiber network) Ch. xxxx INP (10 channels added for xxxx = 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 and 1610 nm) 	
	 TP -20 dB (1% tap, test point from inputs) 	
Model OP34M10S-1-99-AS	COM (output to fiber network; I/O to/from fiber network for 1310)	
	 1310 (input/output to/from fiber network for 1310 nm) 	
	• Ch. xxxx INP (10 channels added for xxxx = 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 and 1610 nm)	
	TP -20 dB (1% tap, test point from inputs)	

Fiber-Deep

DOCSIS[®] 3.1

Node Segmentation

HPON[™]/RFoG

FTTx

ISP-OP34M10S



TABLE 1: INSERTION LOSS

	OP34M10S-0-00-AS	OP34M10S-1-00-AS	OP34M10S-0-99-AS	OP34M10S-1-99-AS
Insertion losses, max ¹ (dB)				
Ch xxxx INP to COM	3.5	3.9	3.7	4.2
1310 to COM	N/A	1.1	N/A	1.3
Paired insertion loss ²	4.3	5.2	4.8	5.7
COM to -20 dB Tap Ratio, max1 (dB)	N/A	N/A	20.4	20.4

NOTES:

1. Including connectors

2. (Paired insertion loss when combined with 10-wavelength demux module from Ch. xxxx INP to Ch. xxxx OUT)

O P 3 4 M 1 0 S ** A S ** = 1310 nm I/O Port (0 = not present, 1 = present) *** = -20 dB Test Port (00 = not present, 99 = present) A S

RELATED PRODUCTS		
CH3000	OP94D10	
OP34D10S	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.

Copyright Statement: © 2018 ARRIS Enterprises LLC. All rights reserved. ARRIS and the ARRIS logo are trademarks of ARRIS International plc and/or its affiliates. All other trademarks are the property of their respective owners. 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 International plc ("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.

87-10104-RevJ_OP34M10S_CWDM_Mux_10-channel

10/2018 EA-29028

ISP-OP34M10S

Ask us about the complete Access Technologies Solutions portfolio:

Fiber-Deep

DOCSIS[®] 3.1

Node Segmentation

HPON[™]/RFoG

FTTx