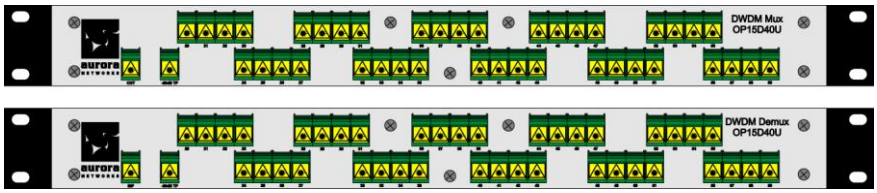
Optical Passives (ISP)

OP15M40, OP15D40

40-channel DWDM Optical Mux and Demux Chassis

FEATURES

- Mux and demux chassis in 1RU 19” housing
- 40 channels on standard DWDM ITU Grid (ITU-T G.694.1, 100 GHz spacing)
- Supports both forward and return path transmission of analog and digital signals
- Wide passband, flat response
- High isolation
- No powering required
- Mux and demux optimized for minimum paired insertion loss across all channels
- SC/APC connectors ensure performance repeatability, compatibility and easy installation and maintenance
- –20 dB Test Point
- Industry’s highest packaging density



PRODUCT OVERVIEW

ARRIS OP15M40 and OP15D40 series multiplexers and demultiplexers facilitate implementation of Dense Wave Division Multiplexing (DWDM) architectures and are designed to minimize the combined insertion loss of multiplexing and demultiplexing. DWDM solutions can dramatically increase network capacity without requiring additional fiber be deployed for super-trunking or narrowcasting applications.

SPECIFICATIONS

Characteristics	Specification	
Physical		
Dimensions	13.1" D x 1.75" H x 19.0" W (1RU) (33.3 cm x 4.5 cm x 48.5 cm)	
Weight	10.1 lbs (4.6 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	
Channel spacing	100 GHz	
Channel plan	*See DWDM ITU Channel Plans description*	
ITU Channel Plans		
	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) for 40 channels from Channel 20 (1561.42 nm) to Channel 59 (1530.33 nm). The OP15M40U and OP15D40U mux and demux chassis encompass all 40 of these channels.	
	For more complete description of available DWDM ITU Grid channels and ARRIS's related products for DWDM mux and demux applications, please refer to the ARRIS DWDM ITU Grid Channel Plan data sheet.	
	When ordering equipment, please note, for network planning purposes, that AT3550 "BA" series broadcast transmitters operate at 1563.0 nm ± 0.9 nm, occupying the approximate region of DWDM ITU Grid channels 17 through 19. Similarly, AT3550 "BC" series broadcast transmitters operate at 1545.3 ±0.9 nm, occupying the approximate region of DWDM ITU Grid channels 39 through 41.	
Optical	**OP15M40U Mux**	**OP15D40U Demux**
Transmit insertion loss[1] (dB)		
Typical	3.6	3.6
Maximum	4.0	4.0
Mux-demux paired insertion loss[1,2] (dB)		
Typical	6.2	6.2
Maximum	6.5	6.5
Uniformity[1] (dB)		
Typical	1.6	1.6
Maximum	2.0	2.0
Paired uniformity[1] (dB)		
Typical	0.8	0.8
Maximum	1.4	1.4
Paired uniformity[1] (dB)		
Typical	0.8	0.8
Maximum	1.4	1.4
Pass band @ 0.5 dB, min (nm)	± 0.125	± 0.125
Directivity, min (dB)	55	*55*
Return loss, min (dB)	45	*45*
Input power handling (any port), max (dBm)	21.8	24.8
Adjacent channel isolation, min (dB)	*N/A*	30
Non-adjacent channel isolation, min (dB)	*N/A*	45

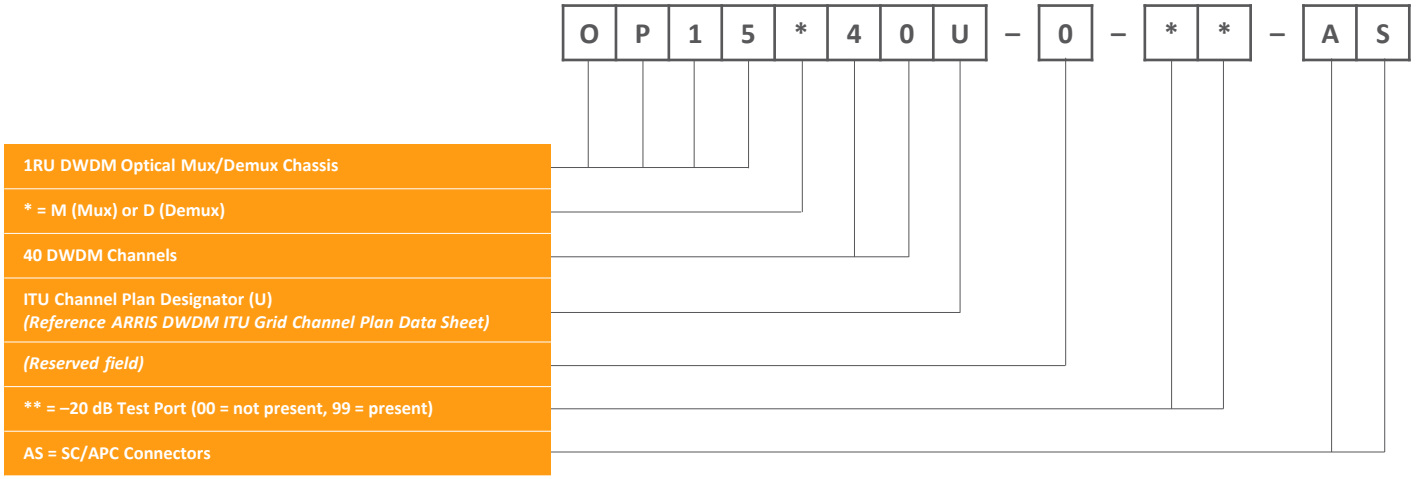
TABLE NOTES:

[1] Insertion losses and uniformity including connector

[2] Paired insertion losses when combined with the corresponding 40-channel mux/demux chassis (from Ch. xx INP to Ch. xx OUT)

Models with –20 dB Test Points are 1% taps, with test point measurements from the DWDM OUT and DWDM INP ports for the OP15M40U and OP15D40U chassis, respectively.

ORDERING INFORMATION



RELATED PRODUCTS

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

87-10220-RevE_OP15M40-D40_MuxDemux

07/2016 ECO10405