

Headend Optics Platform (CH3000)

BP-35M4X

Optical Mux Back Plates
(on 100 GHz-spaced ITU-grid)

FEATURES

- Unique 4-module-wide back plate design provides multiplexing function without need for internal chassis slot
- Eliminates four patch cords
- 4 channels spaced on standard 100 GHz DWDM ITU grid (10 channel plans available)
- Mux optimized for minimum combined insertion loss across all channels
- Flat-top passband
- High optical isolation
- SC/APC connectors ensure performance repeatability, compatibility and easy installation and maintenance
- BP-35M4x-1-00-AS can be used with AT3535G series DWDM Narrowcast Transmitters and DX3515 series Digital Transponders in CH3000 chassis
- BP-35M4x-1-02-AS can be used with DT3515 Digital Return Path Transmitter in CH3000 chassis



PRODUCT OVERVIEW

ARRIS' BP-35M4x series Optical Mux Back Plates facilitate implementation of Dense Wave Division Multiplexing (DWDM) architectures. DWDM technology can dramatically increase network capacity without requiring that additional fiber be deployed for super-trunking or narrowcasting applications.

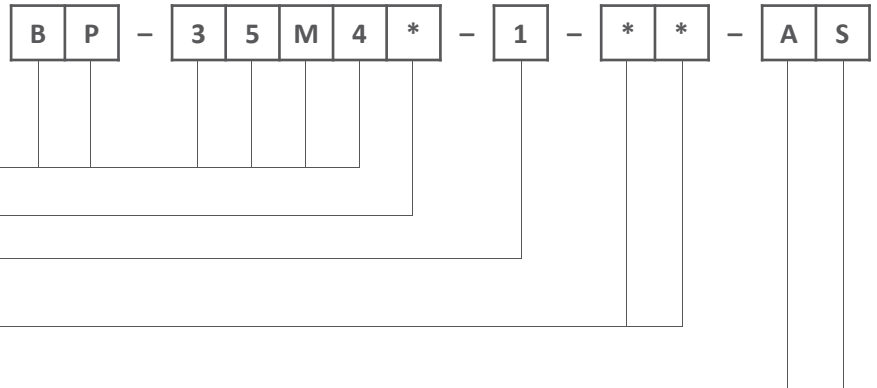
ARRIS's unique packaging of these 4-channel multiplexers as back plates that can be easily attached to the rear of the CH3000 chassis eliminates the need to allocate internal chassis slots for dedicated multiplexer modules.

Further increasing the flexibility and efficiency of the BP-35M4x packaging concept is the fact that the same series models BP-35M4x-1-00-AS back plates can be used to provide multiplexing capabilities for mid-plane connection versions of ARRIS's AT3535G series DWDM Narrowcast Transmitters and DX3515 series Digital Transponders, while the series models BP-35M4x-1-02-AS provide the same multiplexing functionality for ARRIS's DT3515 series Return Path Digital Transmitters.

The pass-through DWDM input and output ports permit the cascading of all the BP-35M4x series multiplexers, and facilitate the sequential muxing of multiple (greater than four) individual ITU channels off of a single optical fiber.

SPECIFICATIONS		
Characteristics	Specification	
Physical		
Dimensions	7.5" D x 5.2" H x 4.25" W (3RU) (19 cm x 13 cm x 11 cm)	
Weight	1.4 lbs (0.7 kg)	
Environmental		
Operating Temperature Range	-20°C to +65°C (23°F to 149°F)	
Storage Temperature Range	-40°C to +85°C (-40°F to +185°F)	
Humidity	5% to 95% non-condensing	
Optical		
Channel spacing	100 GHz	
Channel plan	See ITU Channel Plans description below.	
Insertion losses, including connectors:	typ	max
• Ch. xx OPT INP to DWDM OUT	1.4 dB	1.6 dB
• Paired ¹	2.2 dB	2.5 dB
• DWDM INP to DWDM OUT	1.0 dB	1.2 dB
	¹ Paired insertion loss when combined with 4-channel OP35D4x Demux Module (from Ch. xx OPT INP on BP-35M4x to Ch. xx output port of OP35D4x)	
Uniformity, including connectors:	typ	max
• Module uniformity	0.6 dB	0.8 d
• Paired uniformity	0.4 dB	0.6 dB
Directivity, min:		
• Input ports	55 dB	
• Pass-through port	55 dB	
Passband @ 0.5 dB	± 0.12 nm	
Ripple within passband	0.5 dB	
Return loss, min	50 dB	
Polarization dependent loss, max	0.2 dB (< 0.1 dB typ)	
Power handling, max (any input port)	24.8 dBm	
Optical Interface		
Optical connectors	SC/APC	
DWDM INP	(input from previous mux backplate)	
Ch yy	(4 inputs at virtual mid-plane for Channel Group x)	
DWDM OUT	(output to network or next mux backplate)	
Feed-through Interface		
Model BP-35M4x-1-00-AS	4 optical inputs and 4 RF inputs	
Model BP-35M4x-1-02-AS	8 RF inputs	
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 Ch. 20 (1561.42 nm) to Ch. 59 (1530.33 nm).	
	BP-35M4x-1-xx-AS 4-channel Optical Mux Back Plates (for which outputs can be cascaded from one back plate to another) are available for the following channel groups:	
	BP-35M4J for ITU Ch 20-23	BP-35M4P for ITU Ch 40-43
	BP-35M4K for ITU Ch 24-27	BP-35M4R for ITU Ch 44-47
	BP-35M4L for ITU Ch 28-31	BP-35M4S for ITU Ch 48-51
	BP-35M4M for ITU Ch 32-35	BP-35M4T for ITU Ch 52-55
	BP-35M4N for ITU Ch 36-39	BP-35M4U for ITU Ch 56-59
	For more complete description of available DWDM ITU Grid channels and ARRIS's partitioning into convenient logical groups of 4, 8, and 16 channels in products for DWDM mux and demux applications, please refer to the ARRIS DWDM ITU Grid Channel Plan data sheet.	

ORDERING INFORMATION



- 4-channel Optical Mux Back Plate
- * = DWDM ITU Grid Channel Plan (J, K, L, M, N, P, R, S, T, or U)
- 1 = 100 GHz Channel Spacing on DWDM ITU Grid
- 00 = use with AT3535G series Analog Narrowcast Transmitters or DX3515 series Digital Transponders,
02 = use with DT3515 series Return Path Digital Transmitters
- AS = SC/APC Connector

RELATED PRODUCTS

CH3000 Transmitters	Optical Patch Cords
CH3000 Chassis	Optical Passives
Management Module	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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