

Headend Optics Platform (CH3000)

BP-35M4-CFx
Optical Mux Back Plates
(on 100 GHz-spaced ITU-grid)

FEATURES

- Unique 4-module-wide back plates provide multiplexing function without need for internal chassis slot
- Two model types:
 - BP-35M4-CFx-1-00-AS series for AT3545G Full Spectrum DWDM Transmitters in CH3000 chassis
 - BP-35M4-CFx-1-02-AS series for AT3552 Externally Modulated Full Spectrum Transmitters in CH3000 chassis
- Eliminates four patch cords
- 4 channels spaced on standard 100 GHz DWDM ITU grid (4 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



PRODUCT OVERVIEW

ARRIS' BP-35M4-CFx 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.

The BP-35M4-CFx-1-00-AS series back plates provide multiplexing capabilities for ARRIS's AT3545G series Full Spectrum DWDM Transmitters. One RF input connector per transmitter is provided on these back plates.

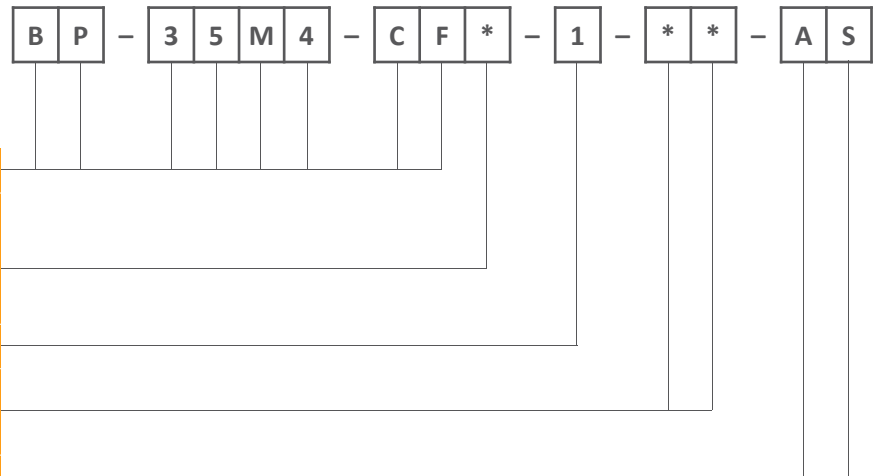
The BP-35M4-CFx-1-02-AS series back plates provide multiplexing capabilities for ARRIS's AT3552 series Externally Modulated Full Spectrum Transmitters. Dual RF connectors (for separate broadcast and narrowcast inputs) are provided on these back plates.

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.

The pass-through DWDM input and output ports permit the cascading of all BP-35M4-CFx series multiplexers, and facilitate the sequential muxing of multiple individual ITU channels off 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) (no chassis slot required)	
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
• DWDM INP to DWDM OUT	1.0 dB	1.2 dB
Uniformity, including connectors:	typ	max
• Module uniformity	0.6 dB	0.8 d
• Paired uniformity	0.4 dB	0.6 dB
Directivity, min:		
• Input port	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)	
DWDM OUT	(output to network or next mux backplate)	
Feed-through Interface		
BP-35M4-CFx-1-00-AS	4 RF inputs	
BP-35M4-CFx-1-02-AS	8 RF inputs (4 BC and 4 NC ports)	
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).	
	BP-35M4-CFx-1-0x-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-35M4-CF1-1-0x-AS	Chs 20, 21, 24, and 29
	• BP-35M4-CF2-1-0x-AS	Chs 35, 42, 52, and 54
	• BP-35M4-CF3-1-0x-AS	Chs 23, 33, 44, and 47
	• BP35-M4-CF4-1-0x-AS	Chs 51, 57, 58, and 59

ORDERING INFORMATION



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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