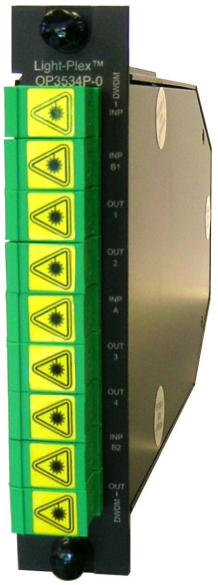
Headend Optics Platform (CH3000)

OP3534

Light-Plex™ Optical Narrowcast Demux with BC/NC Combiner



FEATURES

- Low loss integrated narrowcast demultiplexer with broadcast splitter and broadcast/narrowcast combiner
- Totally passive module
- Simplifies installation and reduces rack space requirements
- Eliminates most fiber jumpers normally associated with BC-NC combining
- Occupies one half-depth slot

PRODUCT OVERVIEW

The Model OP3534 is a combined narrowcast demultiplexer and broadcast/narrowcast combiner. The OP3534 features four optical input ports (one carrying the DWDM narrowcast services and the other three for either a single four-way split or dual two-way splits of broadcast services) and five output ports (one narrowcast services pass-through port and four combined broadcast/narrowcast ports). Each OP3534 demultiplexes up to four DWDM wavelengths and is available in various wavelength combinations.

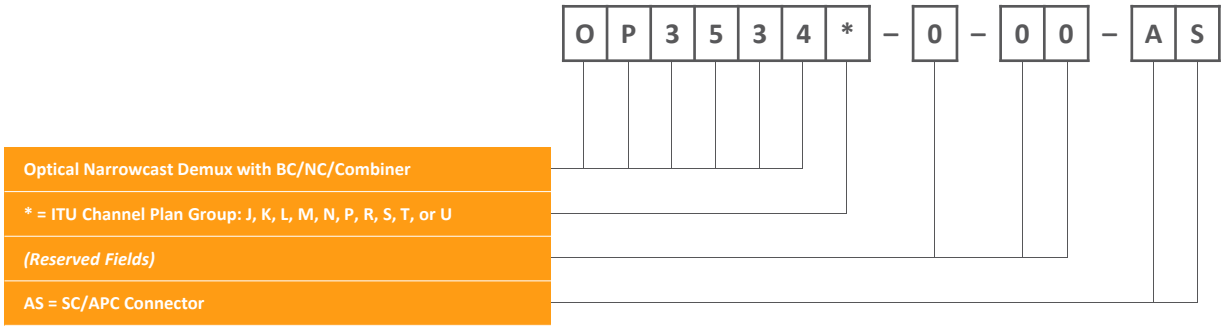
One broadcast optical signal can be equally split four ways or each of two independent broadcast signals can be split two ways, while the narrowcast carriers are separated by a four-channel ITU-grid demultiplexer (on the 100 GHz-spaced ITU grid). Each narrowcast optical carrier is then multiplexed with one of the common broadcast optical signals and passed to one of the four output ports. DWDM optical carriers whose wavelengths are not dropped by the demux are passed through to the DWDM output port.

By adding optical narrowcast carriers, the OP3534 allows MSOs to offer new, revenue-generating services, such as digital video, video-on-demand, high-speed data and telephony, more easily and cost-effectively than ever before.

SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions	6.5" D x 5.2" H x 1.0" W (3RU) (16.5 cm x 13 cm x 2.5 cm)
Weight	1.5 lbs (0.68 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 Interface	
Optical connectors	SC/APC
Inputs	DWDM INP (narrowcast content), BROADCAST A, B1, B2
Outputs	• DWDM OUT (pass-through of all DWDM wavelengths not dropped) • #1, #2, #3, #4 (combined broadcast and one dropped DWDM NC)
Optical	
Optical return loss	42 dB min
Polarization Dependent Loss (PDL)	0.35 dB max
Directivity	52 dB min
Optical power handling	27 dBm max
Broadcast:	
Insertion loss (including connectors)	• Broadcast Input Port A: 7.0 dB max (< 6.6 dB typ) • Broadcast Input Ports B1, B2: 4.0 dB max (< 3.6 dB typ)
Uniformity (including connectors)	0.6 dB max (< 0.4 dB typ)
Passband	At any given output port, the pass band for the BC signal transverses the entire C-band (or EDFA gain band), excluding the NC wavelength to be dropped at that port.
Wavelength Pass Through	1424.5–1617.5 nm (input and output)
DWDM Narrowcast:	
ITU channels dropped	*See ITU Channel Plans*
Passband @ 0.5 dB *(centered on DWDM ITU grid)*	± 0.11 nm
Ripple within passband	0.5 dB
Insertion loss (including connectors)	• DWDM IN to #n OUT: 2.6 dB max (< 1.6 dB typ) • DWDM IN to DWDM OUT: 1.4 dB max (< 0.8 dB typ)
Paired insertion loss (including connectors)	3.6 dB max (Paired insertion loss measured when combined with a single correspondent 4-λ mux module, models OP35M4x-x-xx-AS or BP35M4x-0-xx-AS, Ch. yy INP to Ch. yy OUT)
Optical channel isolation	• Adjacent: 55 dB min (> 65 dB typ) • Non-adjacent: 55 dB min (> 65 dB typ)
Uniformity	0.6 dB max *(difference between max and min output power across the four output ports)*
ITU Channel Plans	
	ARRIS supports DWDM network architectures with a variety of products on the standard DWDM ITU Grid (ITU-T G.694.1). For more complete description of available DWDM ITU Grid channels and ARRIS's partitioning into convenient logical channel groups for DWDM mux and demux applications, please refer to the ARRIS DWDM ITU Grid Channel Plan data sheet.

ORDERING INFORMATION



RELATED PRODUCTS

CH3000 Chassis	Optical Patch Cords
Optical Transmitters	Optical Passives
BP Back plates	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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