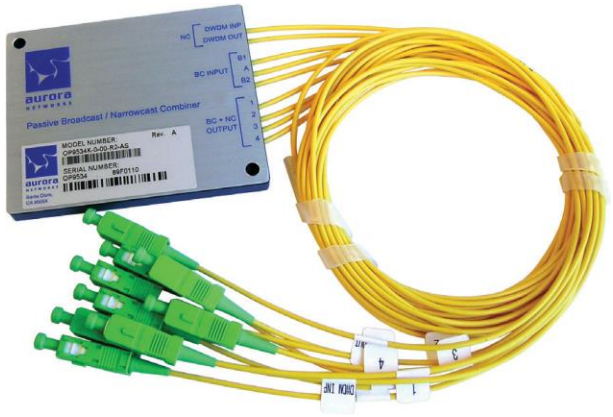
Optical Passives (OSP)

OP9534

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

FEATURES

- Low loss integrated narrowcast demultiplexer with broadcast splitter and broadcast/narrowcast combiner
- Totally passive module
- Eliminates most fiber jumpers normally associated with BC-NC combining
- Available with or without SC/APC connectors
- Epoxy-free on optical path



PRODUCT OVERVIEW

The Model OP9534 is a combined narrowcast demultiplexer and broadcast/narrowcast combiner. The OP9534 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 OP9534 demultiplexes up to four DWDM wavelengths and is available in various wavelength combinations.

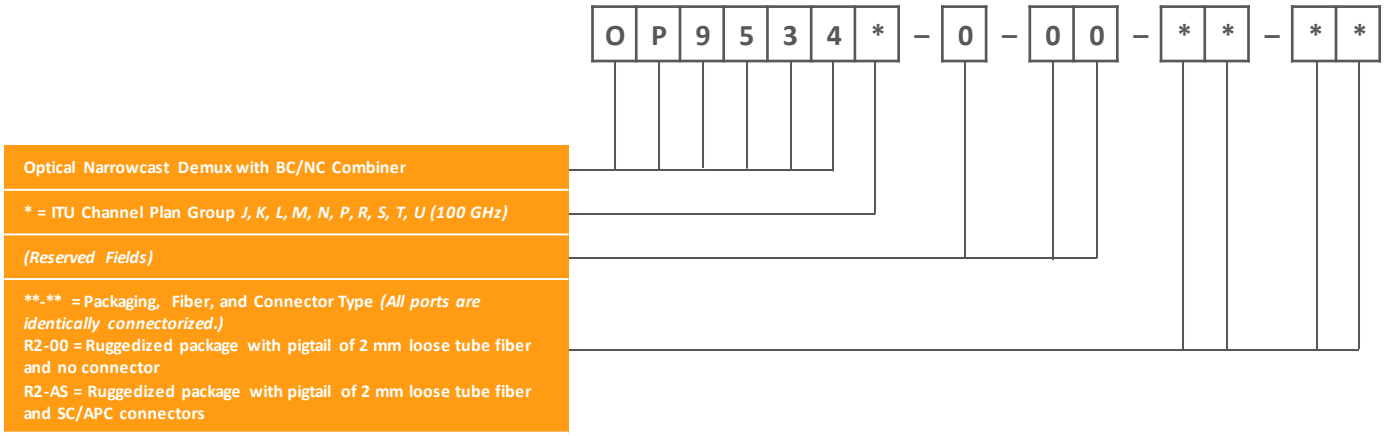
One broadcast optical signal can be equally split four ways or each of two independent broadcast signals can be split two ways, while the narrowcast carriers are separated by a four-channel ITU–grid demultiplexer. Each narrowcast optical carrier is then multiplexed with one of the common broadcast optical 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 OP9534 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	3.8" x 3.1" x 0.3" (9.6 cm x 7.8 cm x 0.8 cm)
Weight	1.5 lbs (0.68 kg)
Environmental	
Operating Temperature Range	–40°C to +85°C (–40°F to +185°F)
Storage Temperature Range	–40°C to +85°C (–40°F to +185°F)
Humidity	5% to 95% non-condensing
Optical Interface	
Optical connectors	*See Ordering Information for available options*
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, min	45 dB
Polarization Dependent Loss (PDL), max	0.25 dB
Directivity, min	55 dB
Broadcast	
Insertion loss (including connectors)	• Broadcast Input Port A: 7.3 dB max (< 6.8 dB typ) • Broadcast Input Ports B1, B2: 3.8 dB max (< 3.5 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	1423.5–1617.5 nm (input and output)
DWDM Narrowcast	
ITU channels dropped	*See ITU Channel Plans*
Passband @ 0.5 dB *(centered on DWDM ITU grid)*	± 0.125 nm
Ripple within passband. max	0.5 dB
Insertion loss (including connectors)	• DWDM IN to #n OUT: 2.1 dB max (< 1.7 dB typ) • DWDM IN to DWDM OUT: 1.2 dB max (< 0.9 dB typ)
Paired insertion loss (including connectors)	2.8 dB max (Paired insertion loss measured when combined with a single correspondent 4-λ mux module, models OP35M4*x-x-xx*-AS or BP35M4x-0-xx-AS, Ch. *yy* INP to Ch. *yy* OUT)
Optical channel isolation Adjacent Non-adjacent	 55 dB min (> 65 dB typ) 55 dB min (> 65 dB typ)
Uniformity (difference between max and min output power across the four output ports), max	0.6 dB
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



Note: Minimum fiber length for all models is 1 meter.

RELATED PRODUCTS

Optical Transmitters	Optical Passives
Digital Return	Optical Patch Cords
Optical Nodes	Installation Services

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
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