Optical Passives (ISP)

OP34M8C, OP34M10C

8- and 10-channel CWDM Multiplexers with Integrated 1310 nm Combiner/Splitter, -20 dB Line Monitoring Tap and LC/APC Connectors
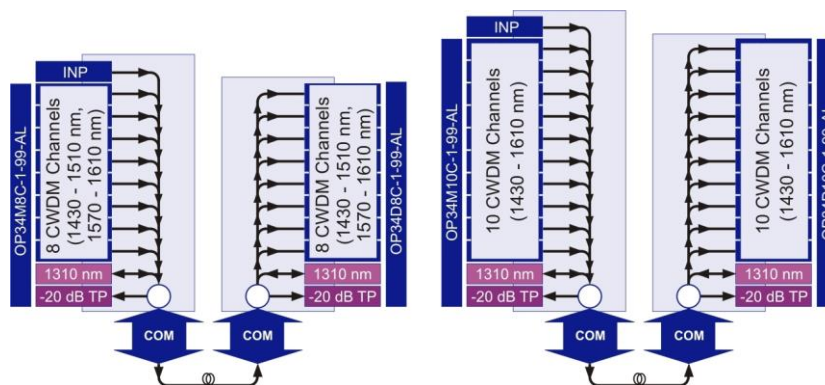
FEATURES

- Flat and wide operating passband on CWDM ITU grid (20 nm spacing)
- Low polarization dependent loss (PDL)
- Telcordia GR-1209 and GR-1221 qualified, providing excellent environmental and mechanical stability
- Integrated 1310 nm combiner/splitter
- Line monitoring tap
- Occupies one half-depth slot
- 1310 nm can act as cascade port

PRODUCT OVERVIEW

The ARRIS OP34M8C and OP34M10C series 8- and 10-channel CWDM multiplexers are designed to multiplex several CWDM ITU-grid optical wavelengths onto one fiber output, with individual wavelengths ranging from 1430 to 1610 nm (with 20 nm spacing between channels) in the model OP34M10C, and 8 of the same 10 wavelengths (excepting 1530 and 1550 nm) in the model OP34M8C.

Fiber-Deep   **DOCSIS® 3.1**   **Node Segmentation**   **HPON™/RFoG**   **FTTx**

SPECIFICATIONS

| Characteristics	Specification
Physical	
Dimensions	6.5" D x 4.3" H x 1.0" W (3RU) (16.5 cm x 11 cm x 2.5 cm)
Weight	1.5 lbs (0.7 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 (all models)	

Passband @ 0.15 dB
    CWDM Ch. xxxx to COM
    INP to COM
	
	± 6.5 nm
	1264.5-1617.5 nm except for add/drop xxxx

Return loss, min	45 dB
CWDM directivity, min	55 dB
1310 directivity, min	65 dB
1310-COM isolation, min:	60 dB
Polarization dependent loss, max	0.15 dB (< 0.1 dB typ)
Ripple within passband	0.5 dB
COM to -20 dB Tap Ratio (including connectors), max	20.4 dB
Channel spacing	20 nm
Power handling, max (any input port)	21.8 dBm
Optical Interface	
Optical connectors	LC/APC
Model OP34M8C-1-99-AL	• COM (output to fiber network; I/O to/from fiber network for 1310) • INP (cascade channel input) • 1310 (input/output to/from fiber network for 1310 nm) • Ch. xxxx INP (8 channels added for xxxx = 1430, 1450, 1470, 1490, 1510, 1570, 1590 and 1610 nm) • TP −20 dB (1% tap, test point from COM)
Model OP34M10C-1-99-AL	• COM (output to fiber network; I/O to/from fiber network for 1310) • INP (cascade channel input) • 1310 (input/output to/from fiber network for 1310 nm) • Ch. xxxx INP (10 channels added for xxxx = 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 and 1610 nm) • TP −20 dB (1% tap, test point from COM)

TABLE 1

	Model Number	
	OP34M8C-1-99-AL	OP34M10C-1-99-AL
Insertion losses, max[1] (dB)		
Ch. xxxx INP to COM	3.4	3.9
INP to COM	2.9	3.4
1310 to COM	1.6	1.6
Paired insertion loss[2]	5.0	5.5

NOTES:

[1] Including connectors;

[2] (Paired insertion loss when combined with 8- or 10-wavelength demux module from Ch. xxxx INP to Ch. xxxx OUT)

ORDERING INFORMATION

O	P	3	4	M	*	*	C	–	1	–	9	9	–	A	L
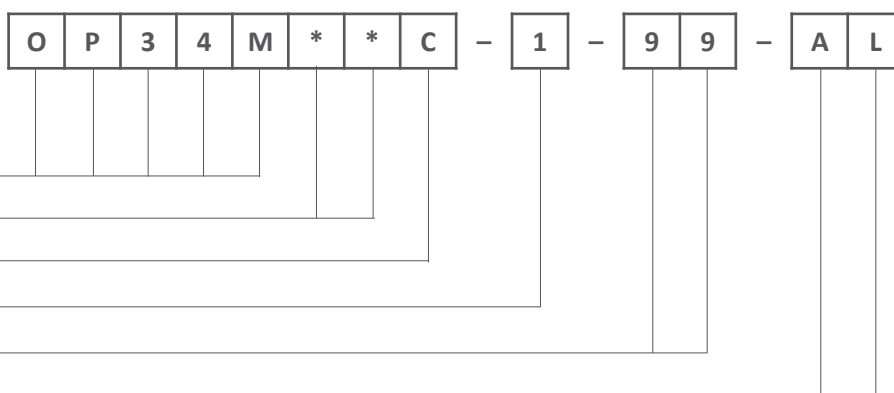
CWDM Multiplexer
** = number of channels (8 or 10)
Reserved field
1310 nm I/O Port present
–20 dB Test Port present
AL = LC/APC Connector

RELATED PRODUCTS

DT4250N-50-00	OP34D8C
DT6250N-50-00	OP94M8C
	OP94D8C
	OP34D10C

Note: Specifications are subject to change without notice.

Customer Care

Contact Customer Care for product information and sales:

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

Ask us about the complete Access Technologies Solutions portfolio: Optical Passives-OP34M8C-M10C

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