

EKINOPS CM_OADM-LB/CM_OM-LB

Cassette Mounted Passive Large-band Filters

DATA SHEET 07 | 2022

KEY FEATURES & BENEFITS

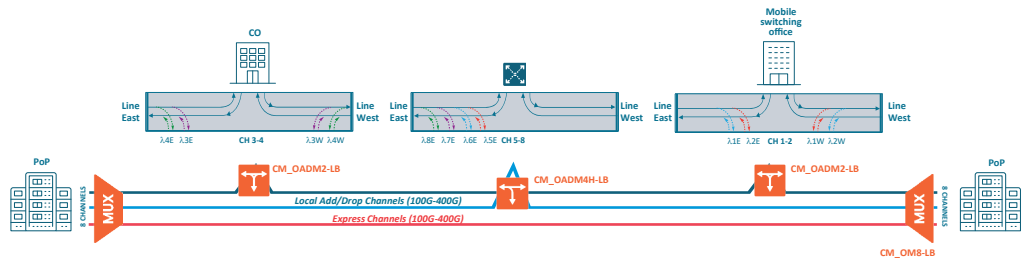
- Provides wider bandwidth than standard filters
- Accommodates high-speed coherent channels up to 400G
- Available on both terminal optical multiplexer (OM) and optical add/drop (OADM) filters
- Supports bi-directional traffic
- Up to 4 modules hosted in 1RU
- Completely passive, no power or maintenance required
- High temperature operation

APPLICATIONS

- Terminal (OM) and inline optical add/drop (OADM) sites
- Coherent networks up to 400G
- Any filter location where ROADM is not required

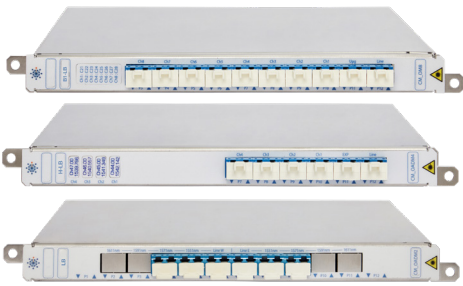
OVERVIEW

Coherent technology made high-speed optical transport possible above 100 gigabits per second. The increasing capacities at which these channels operate require higher baud rates to maintain performance. Higher baud rates, in turn, require wider wavelengths than what a standard filter—whether an optical terminal multiplexer (OM) or optical add/drop multiplexer (OADM)—is able to accommodate. While the most common approach is to use a reconfigurable OADM (ROADM) with flat top filtering, ROADMs are more expensive and many locations simply do not require a ROADM because traffic doesn't change or grow.



The CM_OADM2-LB provides dual sided functionality for up to two channels allowing it to drop and re-add each channel in same direction while the CM_OADM4H-LB provides 4-channel, single sided functionality for drop or add in one direction. Two CM_OADM4H-LB with the same channel assignment can be deployed together to provide 4-channel, dual sided operation, one facing in each direction. The CM_OM8-LB muxes and demuxes up to eight large-band channels at terminal locations.

These modules are ideal for smaller sites with fixed traffic requirements where the full functionality of a reconfigurable OADM (ROADM) is not necessary. With up to four modules hosted in a single 1RU enclosure, these units provide a high density, low cost solution in minimal space.



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SPECIFICATIONS

PHYSICAL SPECIFICATIONS

Module size	1 slot
Operating temperature	0°C to +65°C +32°F to +149°F
Storage temperature	-20°C to +85°C -4°F to +185°F
Optical connectors	LC/PC

OPTICAL CHARACTERISTICS

Dual Sided, Dual Fiber OADMs		CM_OADM2-LB
Wavelength Range (nm)		1528.7 to 1561.5
Channel Spacing (GHz)		100
Number of Channels		2
Channel Center Wavelength		ITU-T, 100GHz
Bandwidth @3dB		>ITU-T +/- 35GHz
Insertion Loss (db)	IN > Drop 1	≤ 1.5
	Add1 > OUT	≤ 1.2
	IN > Drop 2	≤ 1.2
	Add2 > OUT	1.5
	Combined IL	≤3.0
	COM IN > COM OUT (East Line—West Line—Express)	≤ 1.8
Pass band Ripple (dB)		≤ 0.5
Isolation (dB)	Adjacent Channel	≥ 25
	Non-Adjacent Channel	≥ 40
Return Loss (dB)		≥ 45
PDL (dB)		≤ 0.2
PMD. (ps)		≤ 0.2
Power Handling (mW)		300

Single Sided, Dual Fiber OADMs		CM_OADM4H-LB
Wavelength Range (nm)		1528.7 to 1561.5
Channel Spacing (GHz)		100
Number of Channels		4
Channel Center Wavelength		ITU-T, 100GHz
Bandwidth @3dB		>ITU-T +/- 35GHz
Insertion Loss (db)	In to Drop / Add to Out	≤ 1.8
	In to Exp / Exp to Out	≤ 1.5
	Combined IL	≤ 2.8
Pass band Ripple (dB)		≤ 0.5
Isolation (dB)	Adjacent Channel	≥ 25
	Non-Adjacent Channel	≥ 40
Return Loss (dB)		≥ 45
PDL (dB)		≤ 0.2
PMD. (ps)		≤ 0.2
Power Handling (mW)		300





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SPECIFICATIONS



Optical Multiplexer (OM)		CM_OM8-B1-LB
Wavelength Range (nm)		1528.7 to 1561.5
Channel Spacing (GHz)		100
Number of Channels		8
Bandwidth @3dB (GHz)		ITU +/- 35
Insertion Loss (db)	COM to Ports 1-8	≤ 3.5
	COM to Upgrade	≤ 0.8
	Combined IL	≤ 0.5
Pass band Ripple (dB)		
Isolation (dB)	Adjacent Channel	≥ 25
	Non-Adjacent Channel	≥ 40
Return Loss (dB)		≥ 45
PDL (dB)		≤ 0.25

ORDERING INFORMATION

CASSETTE MOUNT (CM)

PRODUCT CODE	DESCRIPTION
CM_OADM2-LB	Cassette mounted 2 channel dual sided wide band add & drop unit
CM_OADM4H-LB	Cassette mounted 4 channel single sided wide band add & drop unit
CM_OM8-B1-LB	Cassette mounted 8 channel wide band MUX/DMUX, with upgrade ports; CH44-51

EKINOPS CHASSIS

PRODUCT CODE	DESCRIPTION
RM_OPR	Optical Passive Rack

CONTACT



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