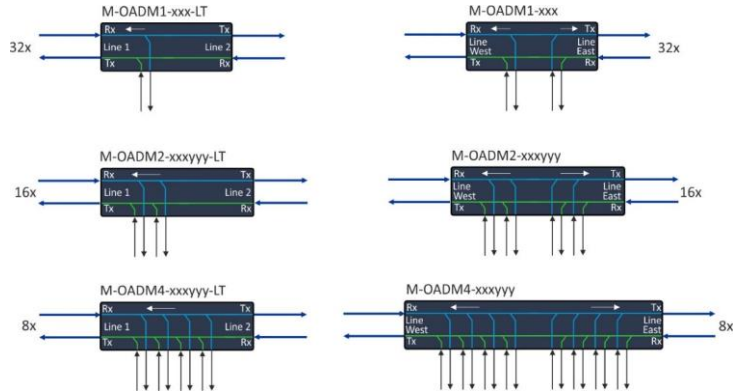


M-OADMx-xxxxyy DWDM OADM SERIES

100GHz, DWDM dual fiber OADMs

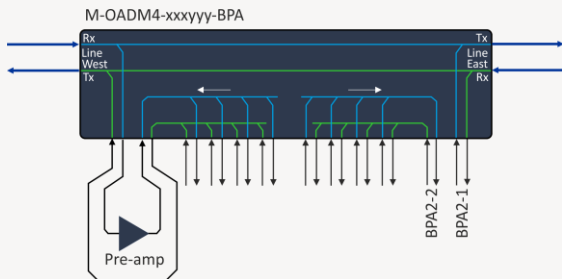


OVERVIEW

The M-Filter Series provides several different OADM filters, both 1-way as well as 2-way options. Each with 1ch, 2ch and 4ch add/drop capabilities, matching the DWDM channels of the DWDM Mux/Demux unit.

OADM filters are ideal for creating bus or ring networks or where only a few channels are required at specific sites, i.e. together with Mux/Demux filters or stand alone.

A special version of the 2-way, 4ch add/drop OADM filter has access to the add/drop channels before they are coupled to the line. The intention with this filter is to enable insertion of a Booster and/or Pre-amplifier to compensate for fiber and filter losses. The figure to the right shows an example where a Pre-amplifier is inserted.



PRODUCT FEATURES

- Flexible OADM networking
- 1/2/4 channel East & West / East or West
- Mid span access nodes for amplification and dispersion
- Passive 1U modular design
- No electric power required. (MTBF ca. 500 years)

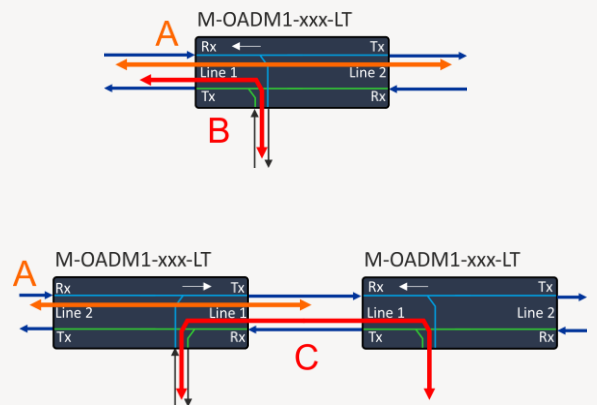
ORDERING INFORMATION

Part number	Description
DWDM East or West OADM	
M-OADM1-xxx-LT	1 RU plug-in module, W=212mm, D= 191.6mm, 1ch DWDM OADM, 100GHz, 1-way, Dxxx, Pass-through loss=0.8dB, A/D-loss=1.2dB, LC/UPC
M-OADM2-xxxxxy-LT	1 RU plug-in module, W=212mm, D= 191.6mm, 2ch DWDM OADM 100GHz 1-way Dxxx-Dyyy, Pass-through loss=1.2dB, A/D-loss=1.8dB, LC/UPC
M-OADM4-xxxxxy-LT	1 RU plug-in module, W=212mm, D= 191.6mm, 4ch DWDM OADM 100GHz 1-way Dxxx-Dyyy, Pass-through loss=0.6dB, A/D-loss=2.8dB, Link-loss= 4.2dB, LC/UPC
DWDM east and west OADM	
M-OADM1-xxx	1 RU plug-in module, W=212mm, D= 191.6mm, 1ch DWDM OADM, 100GHz, 2-way, Dxxx, Pass-through loss=1.2dB, A/D-loss=1.2dB, LC/UPC
M-OADM2-xxxxxy	1 RU plug-in module, W=212mm, D= 191.6mm, 2ch DWDM OADM 100GHz 2-way Dxxx-Dyyy, Pass-through loss=1.8dB, A/D-loss=1.8dB, Link-loss=2.4dB, LC/UPC
M-OADM4-xxxxxy	1 RU plug-in module, W=212mm, D= 191.6mm, 4ch DWDM OADM 100GHz 2-way Dxxx-Dyyy, Pass-through loss=1.2dB, A/D-loss=3.22dB, Link-loss=4.2dB, LC/UPC
Booster/preamp OADM for client access	
M-OADM4-xxxxxy-BPA	1 RU plug-in module, W=212mm, D= 191.6mm, 4ch DWDM OADM 100GHz 2-way Dxxx-Dyyy, Booster/Pre-amp client access, IL A/D=3.2dB, IL BP=1.2dB, LC/UPC

See tables below for actual ordering codes.

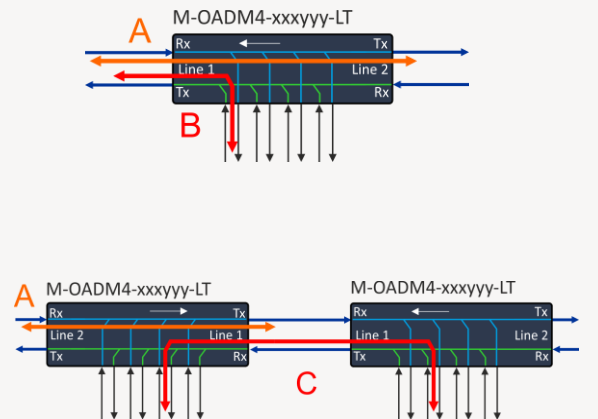
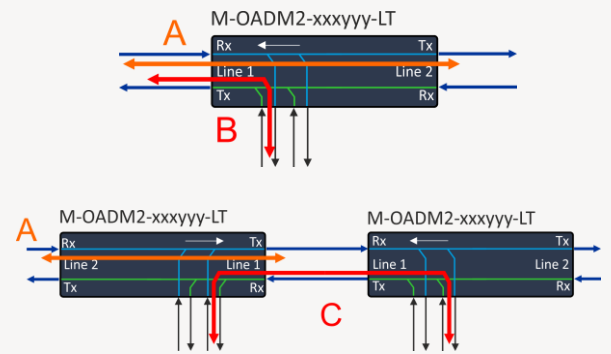
GENERAL SPECIFICATIONS

M-OADM1-xxx-LT (DWDM)	Unit	Value
M-OADM1-921-LT	THz	192.1
M-OADM1-922-LT	THz	192.2
M-OADM1-923-LT	THz	192.3
M-OADM1-924-LT	THz	192.4
M-OADM1-925-LT	THz	192.5
M-OADM1-926-LT	THz	192.6
M-OADM1-927-LT	THz	192.7
M-OADM1-928-LT	THz	192.8
M-OADM1-929-LT	THz	192.9
M-OADM1-930-LT	THz	193.0
M-OADM1-931-LT	THz	193.1
M-OADM1-932-LT	THz	193.2
M-OADM1-933-LT	THz	193.3
M-OADM1-934-LT	THz	193.4
M-OADM1-935-LT	THz	193.5
M-OADM1-936-LT	THz	193.6
M-OADM1-943-LT	THz	194.3
M-OADM1-944-LT	THz	194.4
M-OADM1-945-LT	THz	194.5
M-OADM1-946-LT	THz	194.6
M-OADM1-947-LT	THz	194.7
M-OADM1-948-LT	THz	194.8
M-OADM1-949-LT	THz	194.9
M-OADM1-950-LT	THz	195.0
M-OADM1-951-LT	THz	195.1
M-OADM1-952-LT	THz	195.2
M-OADM1-953-LT	THz	195.3
M-OADM1-954-LT	THz	195.4
M-OADM1-955-LT	THz	195.5
M-OADM1-956-LT	THz	195.6
M-OADM1-957-LT	THz	195.7
M-OADM1-958-LT	THz	195.8
Channel spacing	GHz	100
Insertion loss, pass-through E-W (A)	dB	< 0.8
Add/drop loss (B)	dB	< 1.2
Link loss (C)	dB	< 2.4
Module width	mm	see separate figure
Connector type	-	LC/UPC
Mounting bracket	-	M-ADJ-19
Operating temperature	°C	0 to +70

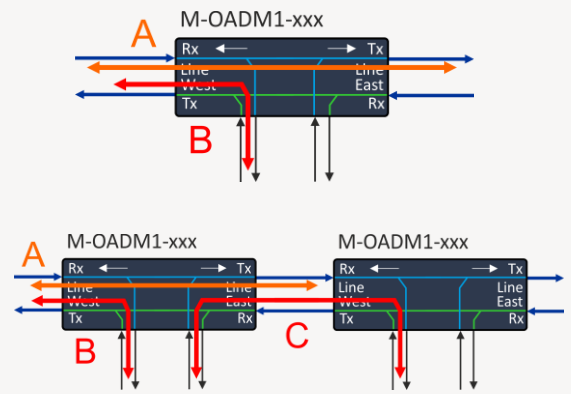


M-OADM2-xxxxyy-LT (DWDM)		Unit	Value
Channels	M-OADM2-921922-LT	THz	192.1, 192.2
	M-OADM2-923924-LT	THz	192.3, 192.4
	M-OADM2-925926-LT	THz	192.5, 192.6
	M-OADM2-927928-LT	THz	192.7, 192.8
	M-OADM2-929930-LT	THz	192.9, 193.0
	M-OADM2-931932-LT	THz	193.1, 193.2
	M-OADM2-933934-LT	THz	193.3, 193.4
	M-OADM2-935936-LT	THz	193.5, 193.6
	M-OADM2-943944-LT	THz	194.3, 194.4
	M-OADM2-945946-LT	THz	194.5, 194.6
	M-OADM2-947948-LT	THz	194.7, 194.8
	M-OADM2-949950-LT	THz	194.9, 195.0
	M-OADM2-951952-LT	THz	195.1, 195.2
	M-OADM2-953954-LT	THz	195.3, 195.4
M-OADM2-955956-LT	THz	195.5, 195.6	
M-OADM2-957958-LT	THz	195.7, 195.8	
Channel spacing	GHz	100	
Insertion loss, pass-through E-W (A)	dB	< 1.2	
Add/drop loss (B)	dB	< 1.8	
Link loss (C)	dB	< 2.4	
Module width	mm	see separate figure	
Connector type	-	LC/UPC	
Mounting bracket	-	M-ADJ-19	
Operating temperature	°C	0 to +70	

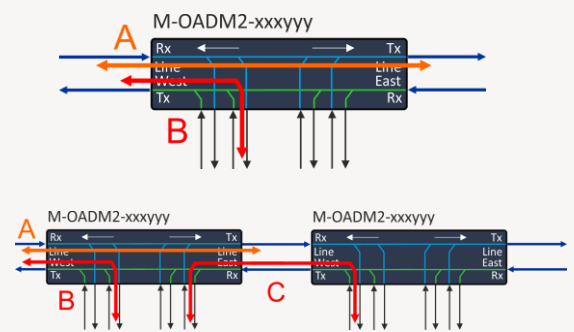
M-OADM4-xxxxyy-LT (DWDM)		Unit	Value
Channels	M-OADM4-921924-LT	THz	192.1, 192.2, 192.3, 192.4
	M-OADM4-925928-LT	THz	192.5, 192.6, 192.7, 192.8
	M-OADM4-929932-LT	THz	192.9, 193.0, 193.1, 193.2
	M-OADM4-933936-LT	THz	193.3, 193.4, 193.5, 193.6
	M-OADM4-943946-LT	THz	194.3, 194.4, 194.5, 194.6
	M-OADM4-947950-LT	THz	194.7, 194.8, 194.9, 195.0
	M-OADM4-951954-LT	THz	195.1, 195.2, 195.3, 195.4
M-OADM4-955958-LT	THz	195.5, 195.6, 195.7, 195.8	
Channel spacing	GHz	100	
Insertion loss, pass-through E-W (A)	dB	< 0.6	
Add/drop loss (B)	dB	< 2.8	
Link loss (C)	dB	< 4.2	
Module width	mm	see separate figure	
Connector type	-	LC/UPC	
Mounting bracket	-	M-ADJ-19	
Operating temperature	°C	0 to +70	



M-OADM1-xxx (DWDM)		Unit	Value
Channels	M-OADM1-921	THz	192.1
	M-OADM1-922	THz	192.2
	M-OADM1-923	THz	192.3
	M-OADM1-924	THz	192.4
	M-OADM1-925	THz	192.5
	M-OADM1-926	THz	192.6
	M-OADM1-927	THz	192.7
	M-OADM1-928	THz	192.8
	M-OADM1-929	THz	192.9
	M-OADM1-930	THz	193.0
	M-OADM1-931	THz	193.1
	M-OADM1-932	THz	193.2
	M-OADM1-933	THz	193.3
	M-OADM1-934	THz	193.4
	M-OADM1-935	THz	193.5
	M-OADM1-936	THz	193.6
	M-OADM1-943	THz	194.3
	M-OADM1-944	THz	194.4
	M-OADM1-945	THz	194.5
	M-OADM1-946	THz	194.6
	M-OADM1-947	THz	194.7
	M-OADM1-948	THz	194.8
	M-OADM1-949	THz	194.9
	M-OADM1-950	THz	195.0
	M-OADM1-951	THz	195.1
	M-OADM1-952	THz	195.2
	M-OADM1-953	THz	195.3
	M-OADM1-954	THz	195.4
M-OADM1-955	THz	195.5	
M-OADM1-956	THz	195.6	
M-OADM1-957	THz	195.7	
M-OADM1-958	THz	195.8	
Channel spacing	GHz	100	
Insertion loss, pass-through E-W (A)	dB	< 1.2	
Add/drop loss (B)	dB	< 1.2	
Link loss (C)	dB	< 2.4	
Module width	mm	see separate figure	
Connector type	-	LC/UPC	
Mounting bracket	-	M-ADJ-19	
Operating temperature	°C	0 to +70	



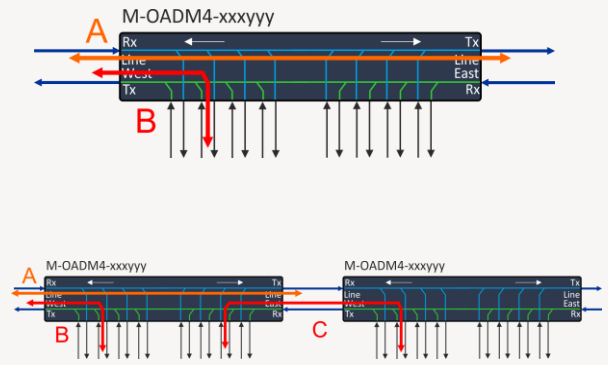
M-OADM2-xxxxxyy (DWDM)		Unit	Value
Channels	M-OADM2-921922	THz	192.1, 192.2
	M-OADM2-923924	THz	192.3, 192.4
	M-OADM2-925926	THz	192.5, 192.6
	M-OADM2-927928	THz	192.7, 192.8
	M-OADM2-929930	THz	192.9, 193.0
	M-OADM2-931932	THz	193.1, 193.2
	M-OADM2-933934	THz	193.3, 193.4
	M-OADM2-935936	THz	193.5, 193.6
	M-OADM2-943944	THz	194.3, 194.4
	M-OADM2-945946	THz	194.5, 194.6
	M-OADM2-947948	THz	194.7, 194.8
	M-OADM2-949950	THz	194.9, 195.0
	M-OADM2-951952	THz	195.1, 195.2
	M-OADM2-953954	THz	195.3, 195.4
	M-OADM2-955956	THz	195.5, 195.6
	M-OADM2-957958	THz	195.7, 195.8
Channel spacing	GHz	100	
Insertion loss, pass-through E-W (A)	dB	< 1.8	
Add/drop loss (B)	dB	< 1.8	
Link loss (C)	dB	< 2.4	
Module width	mm	see separate figure	
Connector type	-	LC/UPC	
Mounting bracket	-	M-ADJ-19	
Operating temperature	°C	0 to +70	



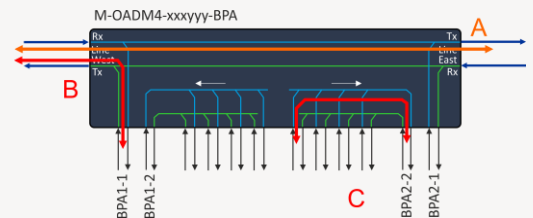
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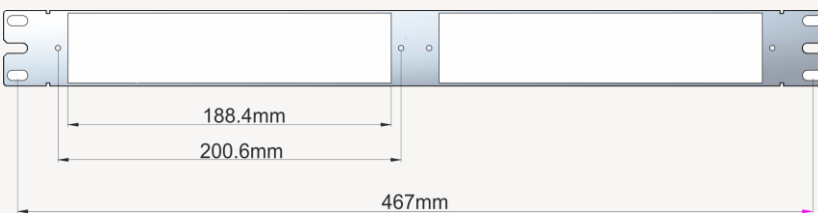
M-OADM4-xxxxyy (DWDM)		Unit	Value
Channels	M-OADM4-921924	THz	192.1, 192.2, 192.3, 192.4
	M-OADM4-925928	THz	192.5, 192.6, 192.7, 192.8
	M-OADM4-929932	THz	192.9, 193.0, 193.1, 193.2
	M-OADM4-933936	THz	193.3, 193.4, 193.5, 193.6
	M-OADM4-943946	THz	194.3, 194.4, 194.5, 194.6
	M-OADM4-947950	THz	194.7, 194.8, 194.9, 195.0
	M-OADM4-951954	THz	195.1, 195.2, 195.3, 195.4
M-OADM4-955958	THz	195.5, 195.6, 195.7, 195.8	
Channel spacing	GHz	100	
Insertion loss, pass-through E-W (A)	dB	< 1.2	
Add/drop loss (B)	dB	< 3.2	
Link loss (C)	dB	< 4.2	
Module width	mm	see separate figure	
Connector type	-	LC/UPC	
Mounting bracket	-	M-ADJ-19	
Operating temperature	°C	0 to +70	



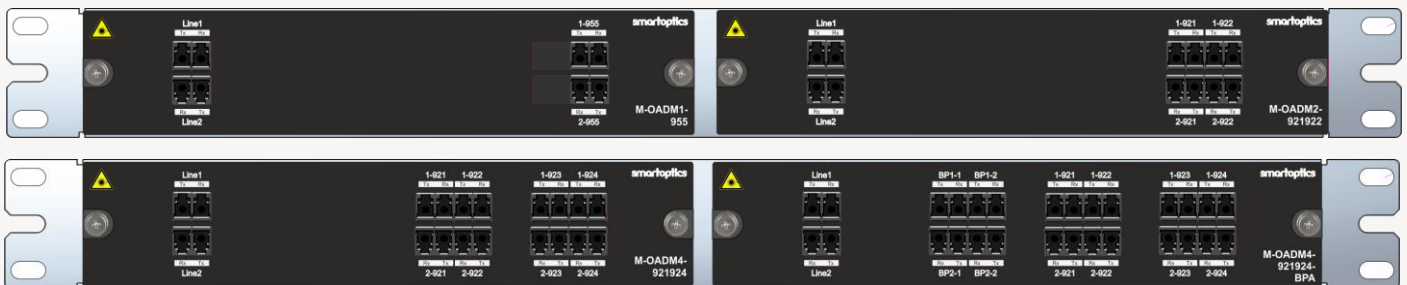
M-OADM4-xxxxyy-BPA (DWDM)		Unit	Value
Channels	M-OADM4-921924-BPA	THz	192.1, 192.2, 192.3, 192.4
	M-OADM4-925928-BPA	THz	192.5, 192.6, 192.7, 192.8
	M-OADM4-929932-BPA	THz	192.9, 193.0, 193.1, 193.2
	M-OADM4-933936-BPA	THz	193.3, 193.4, 193.5, 193.6
	M-OADM4-943946-BPA	THz	194.3, 194.4, 194.5, 194.6
	M-OADM4-947950-BPA	THz	194.7, 194.8, 194.9, 195.0
	M-OADM4-951954-BPA	THz	195.1, 195.2, 195.3, 195.4
M-OADM4-955958-BPA	THz	195.5, 195.6, 195.7, 195.8	
Channel spacing	GHz	100	
Insertion loss, pass-through E-W (A)	dB	< 1.2	
Insertion loss (B)	dB	< 1.0	
Insertion loss (C)	dB	< 2.2	
Module width	mm	see separate figure	
Connector type	-	LC/UPC	
Mounting bracket	-	M-ADJ-19	
Operating temperature	°C	0 to +70	



Mounting bracket M-ADJ-19	Unit	Value
Rack mount	-	19"
Mounting depth (flush mount)	mm	191.6
Height	mm	44.45 (1 RU)
Slot width	mm	188.4



M-Series plug-in module depth.



Two example configurations.

Subject to change without notice.

For more information visit smartoptics.com.

About Smartoptics

Smartoptics offers optical transmission solutions making networks more powerful. Expanding bandwidth without the upfront investment or hassle of traditional WDM. Our products allow corporate data centers, governments, hosting solution providers and ISPs to build simple, straightforward and cost-effective solutions to fulfil their ongoing and future network capacity needs. Headquartered in Oslo, Norway, Smartoptics is an international provider with thousands of installations all around the world. Our award-winning approach has helped companies from every industry sector stay ahead of expanding network demands.

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