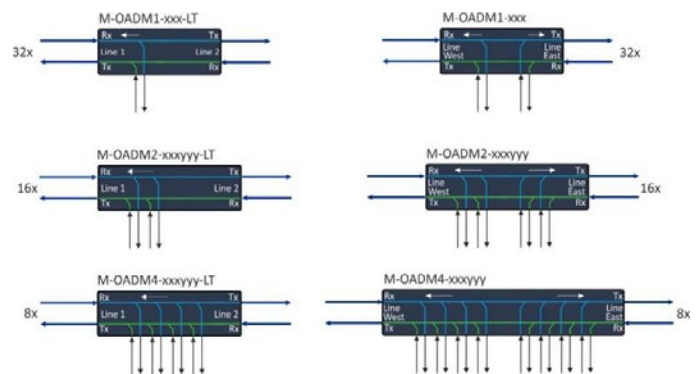


DATASHEET 5.0

M-OADMx-XXXYY DWDM OADM SERIES

100GHz, DWDM dual fiber OADMs

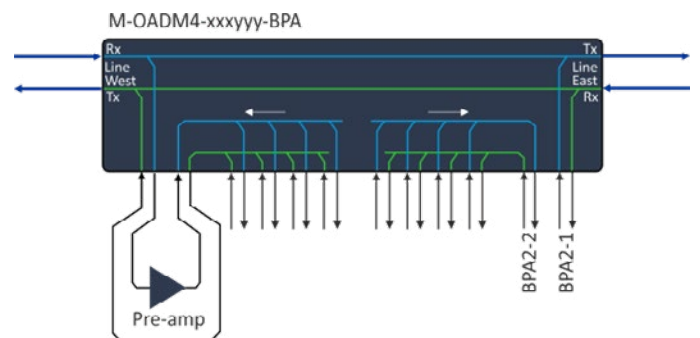


OVERVIEW

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)

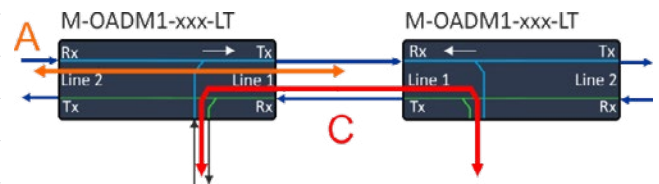
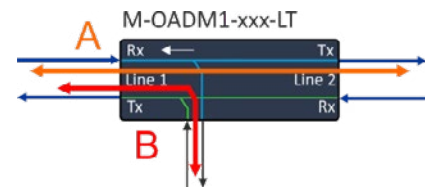
ORDERING INFORMATION

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-xxxxyy-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-xxxxyy-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-xxxxyy	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-xxxxyy	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-xxxxyy-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

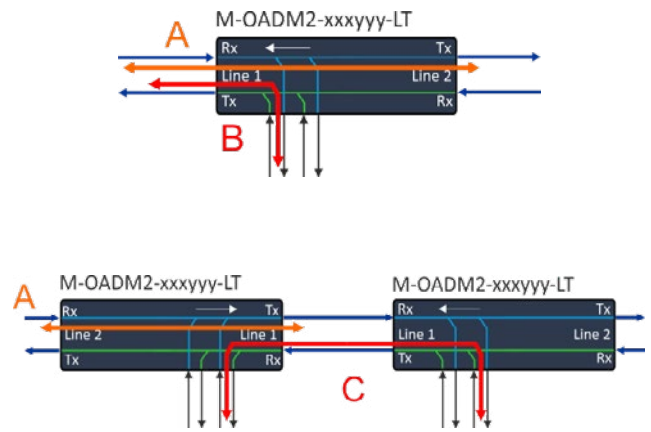
See tables below for actual ordering codes.

PRODUCT FEATURES

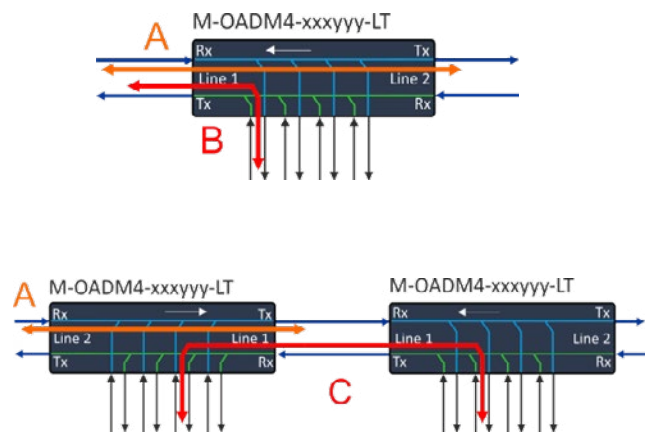
M-OADM1-xxx-LT (DWDM)	Unit	Value
M-OADM1-921-LT	THz	192.1
M-OADM1-922-LT	THz	192.2
M-OADM1-923-LT	THz	192.3
M-OADM1-924-LT	THz	192.4
M-OADM1-925-LT	THz	192.5
M-OADM1-926-LT	THz	192.6
M-OADM1-927-LT	THz	192.7
M-OADM1-928-LT	THz	192.8
M-OADM1-929-LT	THz	192.9
M-OADM1-930-LT	THz	193.0
M-OADM1-931-LT	THz	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-OADM1-937-LT	THz	193.7
M-OADM1-938-LT	THz	193.8
M-OADM1-939-LT	THz	193.9
M-OADM1-940-LT	THz	194.0
M-OADM1-941-LT	THz	194.1
M-OADM1-942-LT	THz	194.2
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



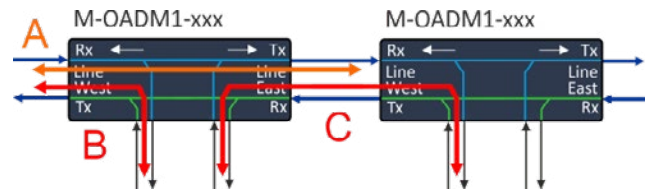
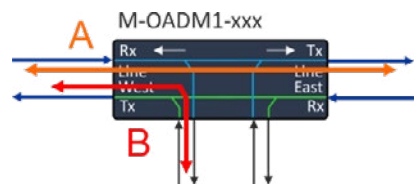
M-OADM2-xxxxxyy-LT (DWDM)	Unit	Value
M-OADM2-921922-LT	THz	192.1, to 192.2
M-OADM2-923924-LT	THz	192.3, to 192.4
M-OADM2-925926-LT	THz	192.5, to 192.6
M-OADM2-927928-LT	THz	192.7, to 192.8
M-OADM2-929930-LT	THz	192.9, to 193.0
M-OADM2-931932-LT	THz	193.1, to 193.2
M-OADM2-933934-LT	THz	193.3, to 193.4
M-OADM2-935936-LT	THz	193.5, to 193.6
M-OADM2-943944-LT	THz	194.3, to 193.4
M-OADM2-945946-LT	THz	194.5, to 194.6
M-OADM2-947948-LT	THz	194.7, to 194.8
M-OADM2-949950-LT	THz	195.3, to 195.0
M-OADM2-951952-LT	THz	195.5, to 195.2
M-OADM2-953954-LT	THz	195.7, to 195.4
M-OADM2-955956-LT	THz	195.7, to 195.6
M-OADM2-957958-LT	THz	195.7, to 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



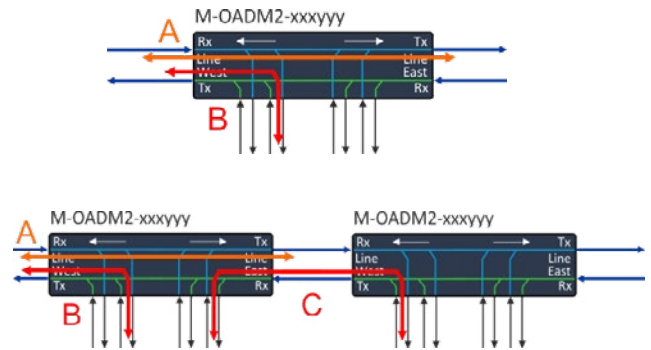
M-OADM4-xxxxxyy-LT (DWDM)	Unit	Value
M-OADM4-921924-LT	THz	192.1, 192.2, 192.3, 192.4
M-OADM4-925928-LT	THz	192.5, 192.6, 192.7, 192.8
M-OADM4-929932-LT	THz	192.9, 193.0, 193.1, 193.2
M-OADM4-933936-LT	THz	193.3, 193.4, 193.5, 193.6
M-OADM4-943946-LT	THz	194.3, 194.4, 194.5, 194.6
M-OADM4-947950-LT	THz	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,	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 brackey	-	M-ADJ-19
Operating temperature	°C	0 to +70



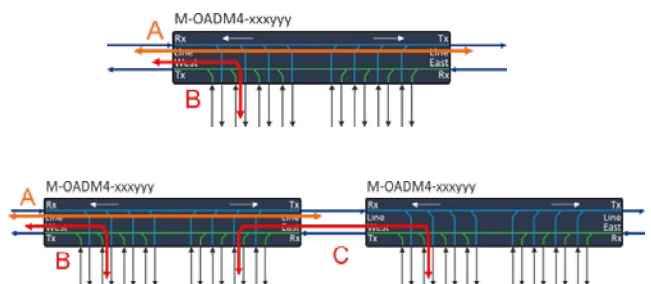
M-OADM1-xxx (DWDM)	Unit	Value
M-OADM1-921	THz	192.1
M-OADM1-922	THz	192.2
M-OADM1-923	THz	192.3
M-OADM1-924	THz	192.4
M-OADM1-925	THz	192.5
M-OADM1-926	THz	192.6
M-OADM1-927	THz	192.7
M-OADM1-928	THz	192.8
M-OADM1-929	THz	192.9
M-OADM1-930	THz	193.0
M-OADM1-931	THz	193.1
M-OADM1-932	THz	193.2
M-OADM1-933	THz	193.3
M-OADM1-934	THz	193.4
M-OADM1-935	THz	193.5
M-OADM1-936	THz	193.6
M-OADM1-937	THz	193.7
M-OADM1-938	THz	193.8
M-OADM1-939	THz	193.9
M-OADM1-940	THz	194.0
M-OADM1-941	THz	194.1
M-OADM1-942	THz	194.2
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



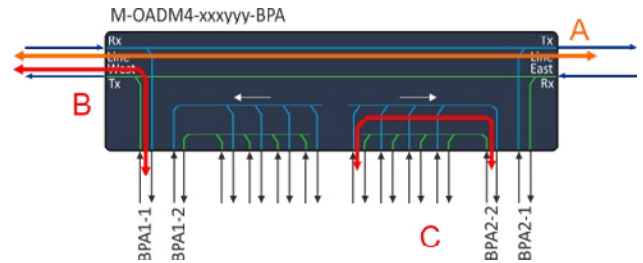
M-OADM2-xxx (DWDM)	Unit	Value
M-OADM2-921922	THz	192.1, 192.2
M-OADM2-923924	THz	192.3, 192.4
M-OADM2-925926	THz	192.5, 192.6
M-OADM2-927928	THz	192.7, 192.8
M-OADM2-929930	THz	192.9, 193.0
M-OADM2-931932	THz	193.1, 193.2
M-OADM2-933934	THz	193.3, 193.4
M-OADM2-935936	THz	193.5, 193.6
M-OADM2-943944	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 figures
Connector type	-	LC/UPC
Mounting bracket	-	M-ADJ-19
Operating temperature	° C	0 to +70



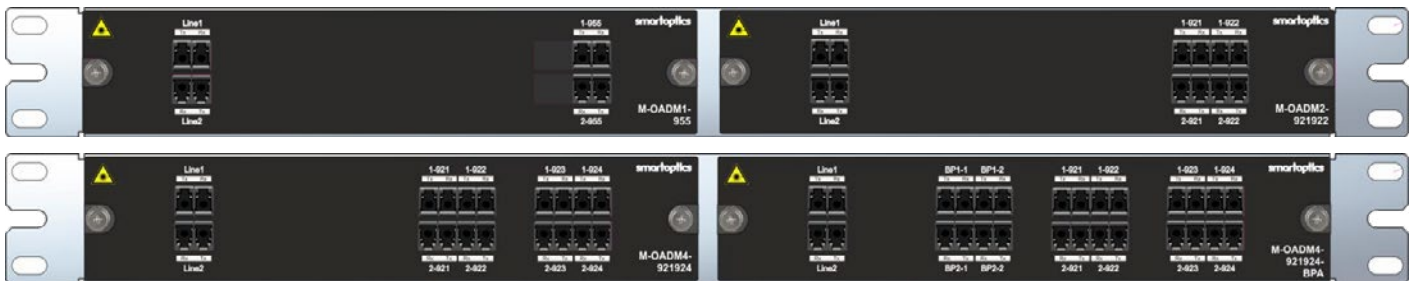
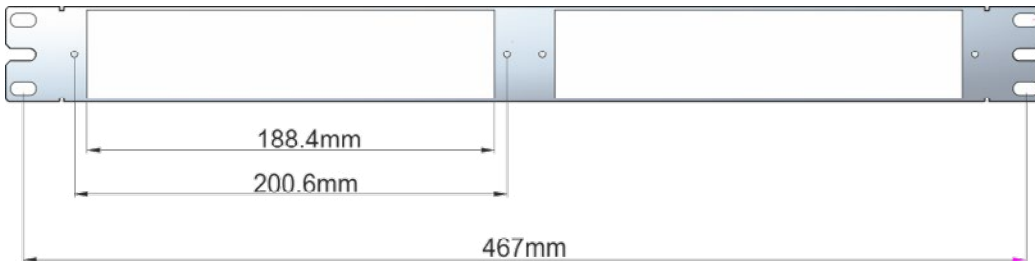
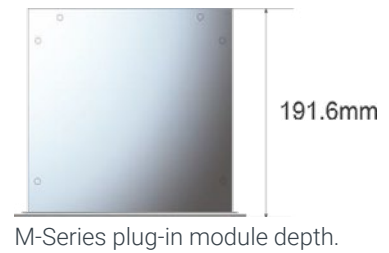
M-OADM4-xxxxxxx (DWDM)	Unit	Value
M-OADM4-921924	THz	192.1, 192.2, 192.3, 192.4
M-OADM4-925928	THz	192.5, 192.6, 192.7, 192.8
M-OADM4-929932	THz	192.9, 193.0, 193.1, 193.2
M-OADM4-933936	THz	193.3, 193.4, 193.5, 193.6
M-OADM4-943946	THz	194.3, 194.4, 194.5, 194.6
M-OADM4-947950	THz	194.7, 194.8, 194.9, 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
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
Add/drop loss (B)	dB	< 1.0
Link 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



Two example configurations.