

BENEFITS

- .no temperature control required
- .optical plug and play

FEATURES

- .passively athermal
- .small footprint
- .high isolation
- .low insertion loss
- .PM option available
- .Telcordia GR-1209 and GR-1221 compliant
- .rack packaging available

APPLICATIONS

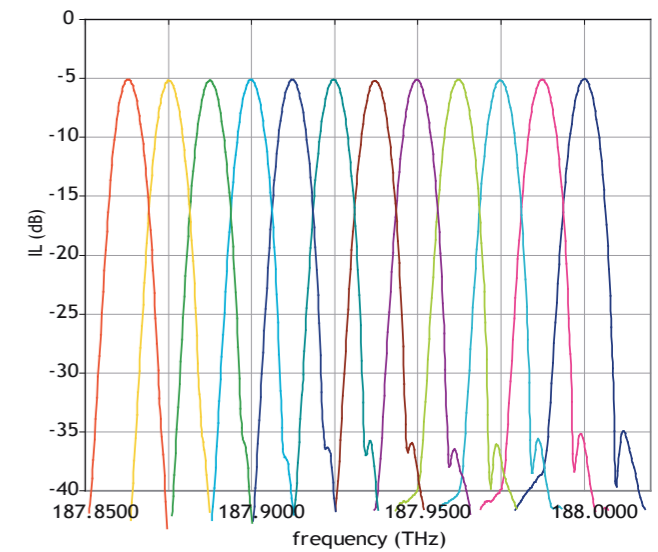
- .replacement of TFF / AWG
- .increasing existing network capacity
- .DWDM PON
- .OADM
- .submarine networks
- .ultra dense networks

mics is an athermal DWDM mux/demux. The product line covers all bands, all numbers of channels and all spacings, even the non-ITU ones. Since 1998 Mics is deployed on the field by system vendors, for metro, long haul and submarine networks.

parameter	unit	gaussian						flat top						
		< 16 channels			< 48 channels			< 16 channels			< 32 channels			
spacing	GHz	50	100	200	50	100	200	50	100	200	50	100	200	
insertion loss	dB	guaranted	4.0	3.5	4.0	5.0	5.0	6.0	6.5	6.0	6.5	7.5	7.0	8.0
		typical	2.5	2.5	3.0	3.0	2.5	4.5	5.5	5.0	5.5	6.0	5.5	6.5
IL uniformity	dB	1.0	1.0	1.0	1.5	1.5	1.5	1.0	1.0	1.0	1.5	1.5	1.5	
PDL	dB	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	
channel center accuracy	GHz	guaranted	± 2.5	± 3.75	± 6.25	± 3.12	± 6.25	± 7.5	± 2.5	± 3.75	± 6.25	± 3.12	± 6.25	± 7.5
		typical	± 1.25	± 1.25	± 3.12	± 2	± 3.75	± 4	± 1.25	± 1.25	± 3.12	± 2	± 3.75	± 4
bandwidth @-1dB	GHz	> 14	> 28	> 56	> 14	> 28	> 56	> 23	> 46	> 92	> 21	> 42	> 84	
bandwidth @-3dB	GHz	> 24	> 48	> 96	> 24	> 48	> 96							
ITU passband	GHz	± 6.25	± 12.5	± 25	± 6.25	± 12.5	± 25	± 6.25	± 12.5	± 25	± 6.25	± 12.5	± 25	
adjacent crosstalk	dB	30	30	30	30	30	30	25	25	25	25	25	25	
non-adjacent crosstalk	dB	40	40	40	40	40	40	40	40	40	40	40	40	
cumulative crosstalk	dB	25	25	25	22	22	22	23	23	23	21	21	21	

mics features the narrowest spacings (down to 12.5 GHz) available on the market, while remaining athermal without compromising on performances. Flat Top version available.

parameter	unit	gaussian				
		< 16 channels		< 48 channels		
spacing	GHz	12.5	25	12.5	25	
insertion loss	dB	guaranted	6.5	5.0	7.5	6.0
		typical	5.5	4.0	6.5	5.0
IL uniformity	dB	1.0	1.0	1.5	1.5	
PDL	dB	0.3	0.3	0.4	0.4	
channel center accuracy	GHz	guaranted	± 1.25	± 2.5	± 1.75	± 3.12
		typical	± 0.75	± 1.25	± 1	± 2
bandwidth @-1dB	GHz	> 3.5	> 7	> 3.5	> 7	
bandwidth @-3dB	GHz	> 6	> 12	> 6	> 12	
ITU passband	GHz	± 1.56	± 3.12	± 1.56	± 3.12	
adjacent crosstalk	dB	28	28	28	28	
non-adjacent crosstalk	dB	40	40	40	40	
cumulative crosstalk	dB	24	24	22	22	

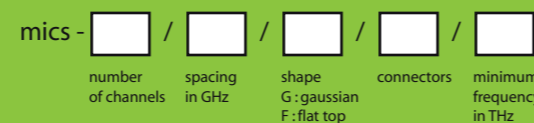


12.5 GHz mux/demux typical response

general specifications

fibre type for SMF	Coreguide SMF-28
fibre type for PMF	PM Panda
cable type	900µm
frequency band	S+C+L (1460 to 1610nm)
PMD	< 0.2 ps
directivity	50 dB
chromatic dispersion	± 10 ps/nm
return loss	30 dB (40 db typ.)
operating temperature range	-5°C to +70°C
IL thermal stability over OTR	± 0.5 dB
wavelength thermal stability	< 1 pm/°C (100GHz spacing)
storage temperature range	-40°C to +85°C
tested to TELCORDIA	GR-1209 and GR-1221

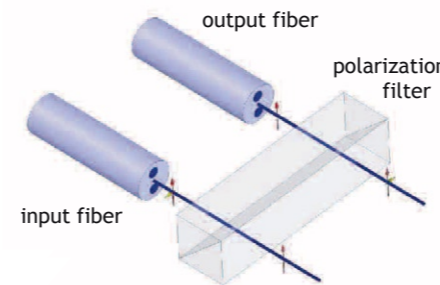
ordering information



PM option is available for each product of KYLIA mux/demux range. PM mics exhibits the highest PER on the market (19dB).

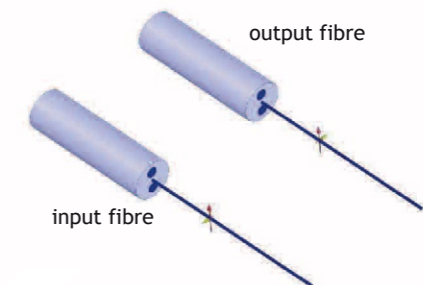
19dB PER configuration

Using a polarization filter, KYLIA guarantees a PER > 19dB. In this configuration, the mux/demux can only be used with input beam polarization oriented along the slow axis.



15dB PER configuration

Without polarization filter, KYLIA guarantees a PER > 15dB. In this configuration, the mux/demux can be used with input beam polarization oriented along both axis, or even as a SM mux/demux.



ordering information

