

Small-form PLC Optical Splitters

Description

Montclair offers a wide selection of high-quality PLC (Planar Lightwave Circuit) optical splitters for a variety of broadband network applications at a low per port cost. These passive components provide superior and reliable performance over a wide operating wavelength range (1260 ~ 1650nm) and temperature range (-40 to +85 °C) to address high-bandwidth and environmental network demands. PLC splitters are available up to 128 ports in standard and custom design housing options.

Applications

-)] FTTx networks
-)] Passive Optical Networks (PONs)
-)] Telecom networks
-)] CATV / RFoG
-)] Local & Wide Area Networks

Features

-)] Low insertion loss & PDL
-)] High return loss & port-to-port uniformity
-)] Wide operating wavelength 1260 ~ 1650nm
-)] Wide operating temperature -40 to +85 °C
-)] Excellent environmental & mechanical stability
-)] Premium grade components & connectivity
-)] Telcordia GR-1221/GR-1209 & GR-326 qualified
-)] RoHS compliant



1x4 small-form PLC splitter (pictured)

3 small-form fiber configuration types



1. 250um ribbon output fiber cable

Output fiber: 250um ribbon

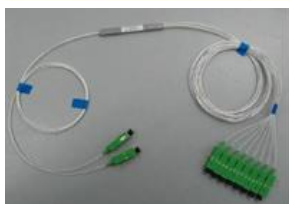
Input fiber options: 250um bare, 900um loose-tube, 900um tight-buffer



2. 900um output fiber cable

Output fiber: 900um loose-tube

Input fiber options: 250um bare, 900um loose-tube, 900um tight-buffer



3. 250um + 900um fan-out output fiber cable

Output fiber: 250um ribbon + 900um loose-tube fan-out

Input fiber options: 250um bare, 900um loose-tube, 900um tight-buffer

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Specifications

1xN Parameters		Value										
Configuration		1x2	1x3	1x4	1x6	1x8	1x12	1x16	1x24	1x32	1x64	1x128
Operating wavelength nm		1260 ~ 1650										
Insertion loss dB	typ.	3.6	6.0	7.0	9.2	10.3	12.2	13.6	15.8	16.6	20.1	24.5
	max.	4.3	6.2	7.4	9.5	10.7	12.5	13.9	16.0	17.2	21.5	25.5
Uniformity dB	max.	0.5	0.6	0.8	0.8	0.8	1.2	1.4	1.5	1.5	2.0	2.6
PDL dB	max.	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.8
TDL dB	max.	0.5										
Return loss dB		≥ 55 / 50										
Directivity dB		≥ 55										
Operating / Storage Temp. °C		-40 to +85										
Fiber type		Singlemode Bend insensitive G657A										

Note: Above values do not include connectors

Steel tube housing dimensions		Value										
Configuration	(HxWxL)	1x2	1x3	1x4	1x6	1x8	1x12	1x16	1x24	1x32	1x64	1x128
250um ribbon	mm	4x4x40	NA	4x4x40	NA	4x4.5x45	4x4.5x45	4x4.5x45	4x7x50	4x7x50	4x12x60	inquire
900 loose tube	mm	4x4.5x45	4x4.5x45	4x4.5x45	4x7x60	4x7x60	4x12x60	4x12x60	4x12x80	6x20x80	6x20x100	inquire
250um+900um	mm	4x4x40	NA	4x4x40	NA	4x4.5x45	4x4.5x45	4x4.5x45	4x7x50	4x7x50	4x12x60	inquire

2xN Parameters		Value						
Configuration		2x2	2x4	2x8	2x16	2x32	2x64	2x128
Operating wavelength nm		1260 ~ 1650						
Insertion loss dB	typ.	4.2	7.2	10.6	13.8	17.0	20.5	24.8
	max.	4.5	7.7	11.0	14.8	17.9	21.5	25.8
Uniformity dB	max.	0.8	1.0	1.2	1.5	1.8	2.5	3.0
PDL dB	max.	0.2	0.3	0.3	0.3	0.3	0.5	1.0
TDL dB	max.	0.5						
Return loss dB		≥ 55 / 50						
Directivity dB		≥ 55						
Operating / Storage Temp. °C		-40 to +85						
Fiber type		Singlemode Bend insensitive G657A						

Note: Above values do not include connectors

Steel tube housing dimensions		Value						
Configuration	(HxWxL)	2x2	2x4	2x8	2x16	2x32	2x64	2x128
250um ribbon	mm	4x4x40	4x4.5x45	4x4.5x45	4x7x60	4x7x65	4x12x60	inquire
900 loose tube	mm	4x4.5x45	4x7x60	4x7x60	4x12x80	6x20x90	6x20x100	inquire
250um+900um	mm	4x4x40	4x4.5x45	4x4.5x45	4x7x60	4x7x60	4x12x60	inquire

Passive

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Ordering information

M T D P - 1 - 6 0 - S - 2 - 3 / 4 - 5

1. Port configuration:

01x02	01x16
01x03	01x24
01x04	01x32
01x06	01x64
01x08	01x128
01x12	
02x02	02x32
02x04	02x64
02x08	02x128
02x16	

2. Connector type:

AFC	LC/APC
FCU	LC/UPC
ALC	LC/APC
LCU	LC/UPC
ASC	SC/APC
SCU	SC/UPC
PL	Pigtail

4. Fiber length input (m):

0.5 ~ 10

3. Fiber length output (m):

0.5 ~ 10

5. Housing type:

R	250um ribbon (1)
9	900um (2)
L	250um ribbon+900um (3)