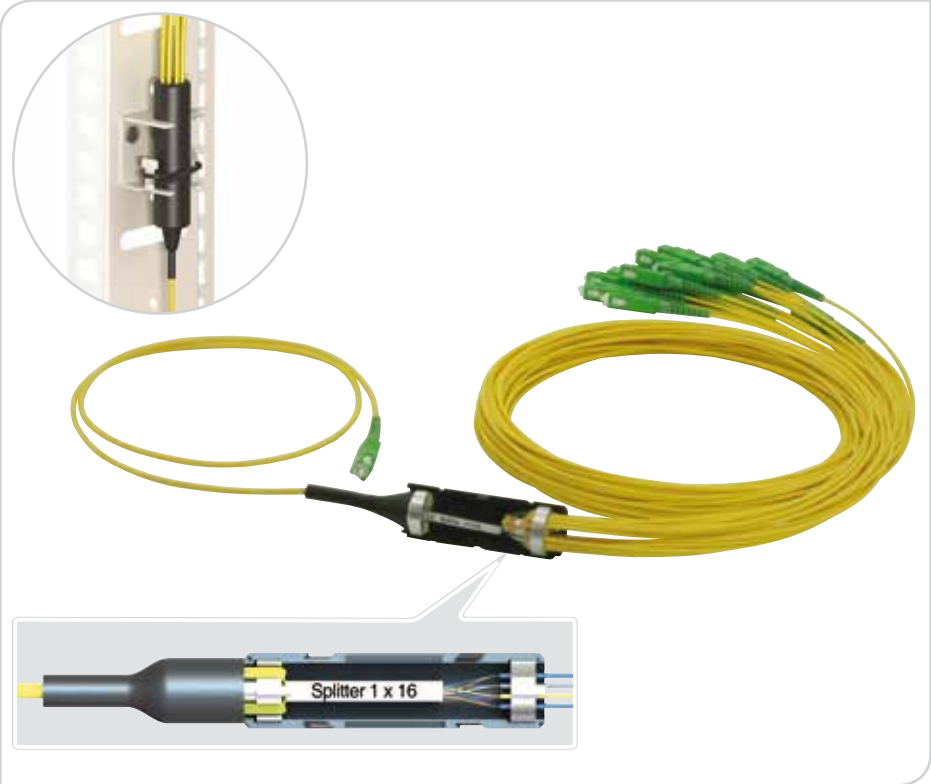
Splitter Cable

Optronics have developed a patented splitter solution. The PLC splitter is housed inside a Optronics breakout unit to offer a ruggedized zero U splitter solution for POP, MDU and node applications within but not limited to the access network. The product is versatile, easy to install and can be deployed within a host of cabinets or racks where passive splitting is required.



Features/Benefits

- **Zero U**
- **Ruggedised**
- **Designed to meet Telcordia standards**
- **Easy to install**

Applications

- **Central office**
- **Head end**
- **POP**
- **MDU**
- **Node/Distribution point**

Technical Specification

Parameters	PLC Splitter Specification Splitter Type (ABS Type)											
	1x2	1x4	1x8	1x16	1x32	1x64	2x2	2x4	2x8	2x16	2x32	2x64
Operating Wavelength	1260~1650nm											
Insertion Loss (AVE, dB)	4	7.3	10.5	13.8	16.8	20.5	4.4	8	11.7	14.7	17.9	21.2
Insertion Loss (MAX, dB)	4.5	7.7	11.2	14.2	17.5	21.5	4.7	8.3	12	15	18.2	21.9
Return Loss (dB)	55	55	55	55	55	55	55	55	55	55	55	55
PDL (AVE, dB)	0.1	0.1	0.15	0.15	0.15	0.2	0.1	0.1	0.2	0.3	0.3	0.4
PDL (MAX, dB)	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.4	0.4	0.4	0.5
Loss Uniformity (AVE, dB)	0.4	0.5	0.6	0.7	0.9	1.3	0.5	1	1	1.2	1.5	2.2
Loss Uniformity (MAX, dB)	0.6	0.8	1	1.4	1.7	2.7	0.8	1.4	1.7	2	2.2	2.7
Directivity (dB)	55	55	55	55	55	55	55	55	55	55	55	55
Operating Temp. (°C)	-40 ~ +85											
Storage Temp. (°C)	-40 ~ +85											
Dimension (L*W*H, mm),	100*80*9	100*80*9	100*80*9	120*8*18	140*114*18	140*114*8	100*80*9	100*80*9	100*80*9	120*8*18	140*114*18	140*114*18

Notes:
(1) All parameters above are tested with APC connectors.
(2) All parameters above are same for G.652D, G.657A1, G.657A2 fibers.

Part Number Generator

Type	Configuration	Wavelength	Cable Type	Input Connectors	Output Connectors	Fibre Type	Lead length input	Lead length output
PCC								

Type	Configuration		Wavelength		Cable Type		Input Connectors		Output Connectors		Fibre Type		Lead length input		Lead length output	
PLC Splitter Cable	**102**	1x2	**A**	1310/1550nm	**1**	900um	**A**	None	**A**	None	**D**	G652D	**1**	1m	**1**	1m
	104	1x4	**B**	1310/1490/ 1550nm	**2**	2mm cable*	**B**	E2000 /UPC	**B**	E2000 /UPC	**A**	G657A	**15**	1.5m	**15**	1.5m
	108	1x8	**C**	Broadband 1260-1650nm			**C**	E2000 /APC	**C**	E2000 /APC			**2**	2m	**2**	2m
	116	1x16					**D**	FC/UPC	**D**	FC/UPC			**25**	2.5m	**25**	2.5m
	132	1x32					**E**	FC/APC	**E**	FC/APC			**3**	3m	**3**	3m
	202	2x2					**F**	LC/UPC	**F**	LC/UPC						
	204	2x4					**G**	LC/APC	**G**	LC/APC						
	208	2x8					**H**	MU/APC	**H**	MU/APC						
	216	2x16					**I**	MU/UPC	**I**	MU/UPC						
	232	2x32					**J**	SC/UPC	**J**	SC/UPC						
							K	SC/APC	**K**	SC/APC						
							L	ST/UPC	**L**	ST/UPC						

*Other lengths available upon request

*Other lengths available upon request

Example Part Number

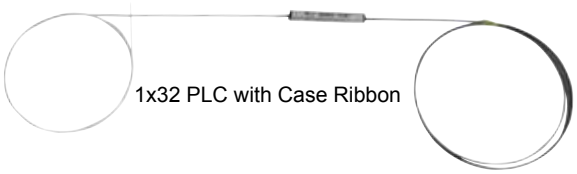
PCC	108	A	2	K	K	D	1	1

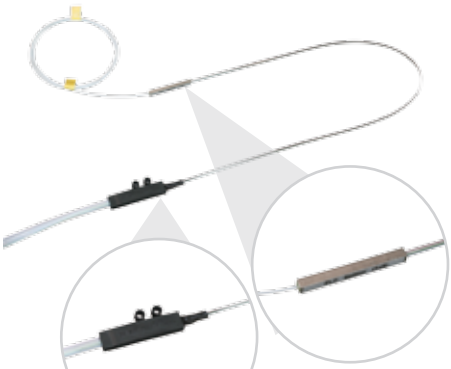
This part number generator has created a:

1x8, 2mm Splitter cable at 1310/1550nm, with SC/A connectors and 1m G652D fibre pigtails

1xN and 2xN PLC Splitters

Growth in today's broadband applications demand reliable high performance splitters for use within a variety of environmental conditions and packaging options. A move towards PON's within the FTTX arena calls for a device offering low insertions loss, linear uniformity and low return loss, FibreFab splitters provide excellent specifications as well as complying to and exceeding Telcordia GR-1221-CORE and GR-1209-CORE standards.


1x32 PLC with Case Ribbon


Fan-out 1x8 PLC with Fan-out


1x8 PLC with ABS Box

Features/Benefits

- **Designed to meet Telcordia standards**
- **Low IL and PDL**
- **Excellent uniformity**
- **Range of packaging options available**
- **High specification connectors available**

Applications

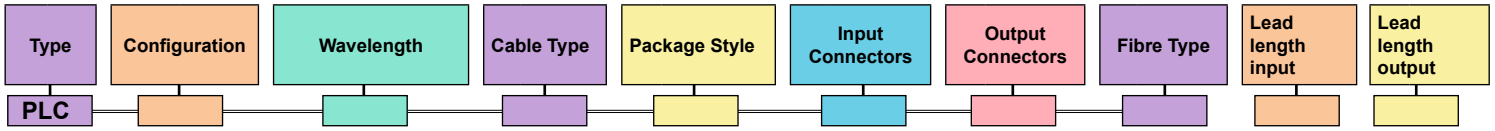
- **FTTX deployments**
- **CATV networks**
- **PON's**
- **WAN's**

Technical Specification

Parameters	PLC Splitter Specification Splitter Type (ABS Type)											
	1x2	1x4	1x8	1x16	1x32	1x64	2x2	2x4	2x8	2x16	2x32	2x64
Operating Wavelength	1260~1650nm											
Insertion Loss (AVE, dB)	4	7.3	10.5	13.8	16.8	20.5	4.4	8	11.7	14.7	17.9	21.2
Insertion Loss (MAX, dB)	4.5	7.7	11.2	14.2	17.5	21.5	4.7	8.3	12	15	18.2	21.9
Return Loss (dB)	55	55	55	55	55	55	55	55	55	55	55	55
PDL (AVE, dB)	0.1	0.1	0.15	0.15	0.15	0.2	0.1	0.1	0.2	0.3	0.3	0.4
PDL (MAX, dB)	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.4	0.4	0.4	0.5
Loss Uniformity (AVE, dB)	0.4	0.5	0.6	0.7	0.9	1.3	0.5	1	1	1.2	1.5	2.2
Loss Uniformity (MAX, dB)	0.6	0.8	1	1.4	1.7	2.7	0.8	1.4	1.7	2	2.2	2.7
Directivity (dB)	55	55	55	55	55	55	55	55	55	55	55	55
Operating Temp. (°C)	-40 ~ +85											
Storage Temp. (°C)	-40 ~ +85											
Dimension (L*W*H, mm), Component type	60*7*4	60*7*4	60*7*4	60*12*5	80*20*6	100*20*6	60*7*4	60*7*4	60*7*4	80*12*5	100*20*6	N/A
Dimension (L*W*H, mm), ABS type	100*80*9	100*80*9	100*80*9	120*8*18	140*114*18	140*114*8	100*80*9	100*80*9	100*80*9	120*8*18	140*114*18	140*114*18

Notes:
(1) All parameters above are tested with APC connectors.
(2) All parameters above are same for G.652D, G.657A1, G.657A2 fibers.

Part Number Generator



Type
PLC Splitter

Configuration	
102	1x2
104	1x4
108	1x8
116	1x16
132	1x32
164	1x64
202	2x2
204	2x4
208	2x8
216	2x16
232	2x32
264	2x64

Wavelength	
A	1310/1550nm
B	1310/1490/ 1550nm
C	Broadband 1260-1650nm

Cable Type	
0	250um
1	900um
2	2mm cable*
3	3mm cable*

*Splitters requiring 2mm & 3mm cable will be supplied in a plastic module with flying pigtails

Package Style	
A	Case ribbon
B	Fan-out unit
C	2&3mm module

Input Connectors	
A	None
B	E2000 /UPC
C	E2000 /APC
D	FC/UPC
E	FC/APC
F	LC/UPC
G	LC/APC
H	MU/APC
I	MU/UPC
J	SC/UPC
K	SC/APC
L	ST/UPC

Output Connectors	
A	None
B	E2000 /UPC
C	E2000 /APC
D	FC/UPC
E	FC/APC
F	LC/UPC
G	LC/APC
H	MU/APC
I	MU/UPC
J	SC/UPC
K	SC/APC
L	ST/UPC

Fibre Type	
D	G652D
A	G657A

Lead length input	
1	1m
15	1.5m
2	2m
25	2.5m
3	3m

*Other lengths available upon request

Lead length output	
1	1m
15	1.5m
2	2m
25	2.5m
3	3m

*Other lengths available upon request

Example Part Number

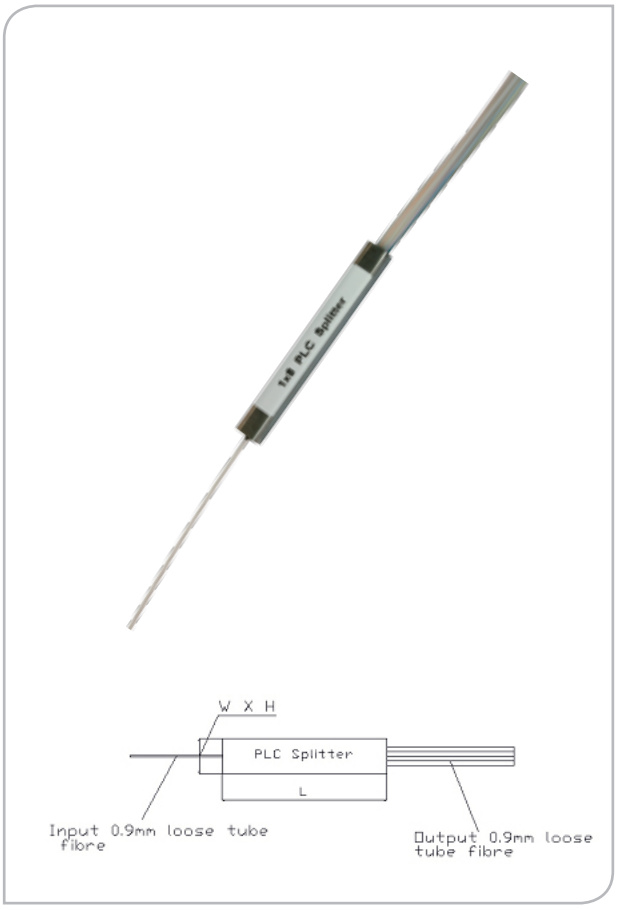
PLC	102	A	0	A	A	A	D	1	1

This part number generator has created a:

1x2, 250µm, Ribbon Fibre Splitter at 1310/1550nm with no connectors, 1m G652D pigtails.

Compact 900μm PLC Splitter

FibreFab has introduced a range of highly reliable, high performance compact splitters. The compact splitter is specifically design to remove the need for a ribbon fibre to 900µm fibre Fan-Out unit, with the 900µm cable exiting directly from the PLC housing



Features

- **Designed to meet Telcordia standards**
- **Compact housing design for small space applications**
- **Low IL and PDL**
- **Excellent uniformity**
- **High specification connectors available**

Technical Specification

Parameters	**1x2**	**1x4**	**1x8**	**1x16**	**1x32**	**2x4**	**2x8**	**2x16**	**2x32**
Insertion Loss (MAX, dB)	3.8	7.2	10.5	13.5	16.5	7.5	11.2	14.2	17.4
Loss Uniformity (MAX, dB)	0.4	0.6	0.8	1.2	1.5	1.2	1.5	1.8	2
PDL (MAX, dB)	0.3	0.2	0.3	0.3	0.3	0.2	0.4	0.4	0.4
Return Loss (dB)	55	55	55	55	55	55	55	55	55
Directivity (dB)	55	55	55	55	55	55	55	55	55
Temperature Range (°C)	-40 + 85								
Fibre Type	G652.D or G657.A								
Fibre Length (m)	1.2(±0.1) or customer specified								
Connector Type	Customer specified								
Dimensions (L x W x H, mm)	60x7x4	60x7x4	60x7x4	60x12x5	80x20x6	60x7x4	60x7x4	80x12x5	100x20x6

Notes:
(1) All measurements were performed at room temperature, at wavelength 1310nm &1550nm.
(2) Coupling losses at the interfaces between the splitter chip and I/O fibres are included.

Part Number Generator

Type	Configuration	Wavelength	Cable Type	Input Connectors	Output Connectors	Fibre Type	Lead Length Input	Lead Length Output
PCS								
PLC Compact Splitter	102 1x2 104 1x4 108 1x8 116 1x16 132 1x32 202 2x2 204 2x4 208 2x8 216 2x16 232 2x32	A 1310/1550nm B 1310/1490/1550nm C Broadband 1260-50nm	1 900um	A None B E2000 /UPC C E2000 /APC D FC/UPC E FC/APC F LC/UPC G LC/APC H MU/APC I MU/UPC J SC/UPC K SC-APC L ST/UPC	A None B E2000 /UPC C E2000 /APC D FC/UPC E FC/APC F LC/UPC G LC/APC H MU/APC I MU/UPC J SC/UPC K SC-APC L ST/UPC	D G652D A G657A	1 1m 15 1.5m 2 2m 25 2.5m 3 3m *Other lengths available upon request	1 1m 15 1.5m 2 2m 25 2.5m 3 3m *Other lengths available upon request

Example Part Number

PCS	102	A	1	A	A	D	1	1

This part number generator has created a:

1X2 PLC Splitter with 900µm cable and no connectors using G652D fibre at 1310 & 1550 with 1m pigtail.

1xN and 2xN PLC Splitter Modules

FibreFab has introduced a range of high performance splitters loaded into a variety of management products to include 19" rack mounted panels and LGX modules. A move toward PON's within the FTTX arena calls for a device offering low insertions loss, linear uniformity and low return loss, FibreFab splitters provide excellent specifications on all of the above as well as complying to and exceeding Telcordia GR-1221-CORE and GR-1209-CORE standards.

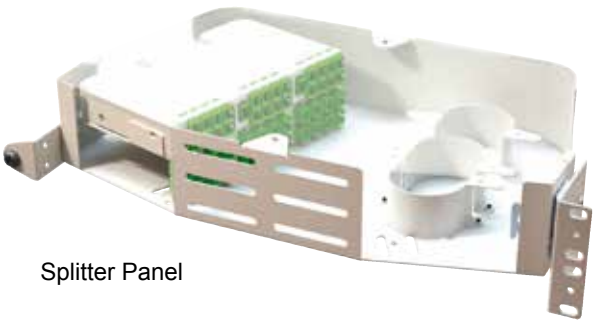
Features/Benefits

> **Designed to meet Telcordia standards**
> **Non-standard housing options available**
> **Low IL and PDL**
> **Excellent uniformity**
> **Range of packaging options available**
> **High specification connectors available**

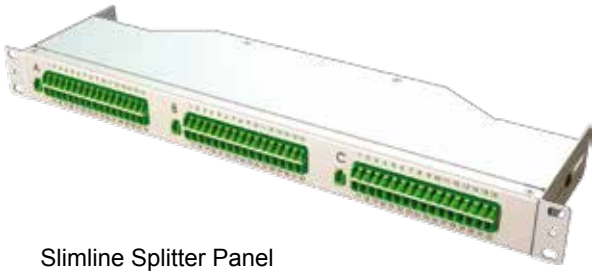
Applications

> **Central Office**
> **Headend**
> **POP**
> **MDU**
> **Mode/Distribution point**

LGX available on request



Splitter Panel



Slimline Splitter Panel

Wall Box

Technical Specification

Parameters	PLC Splitter Specification Splitter Type (ABS Type)											
	1x2	1x4	1x8	1x16	1x32	1x64	2x2	2x4	2x8	2x16	2x32	2x64
Operating Wavelength	1260~1650nm											
Insertion Loss (AVE, dB)	4	7.3	10.5	13.8	16.8	20.5	4.4	8	11.7	14.7	17.9	21.2
Insertion Loss (MAX, dB)	4.5	7.7	11.2	14.2	17.5	21.5	4.7	8.3	12	15	18.2	21.9
Return Loss (dB)	55	55	55	55	55	55	55	55	55	55	55	55
PDL (AVE, dB)	0.1	0.1	0.15	0.15	0.15	0.2	0.1	0.1	0.2	0.3	0.3	0.4
PDL (MAX, dB)	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.4	0.4	0.4	0.5
Loss Uniformity (AVE, dB)	0.4	0.5	0.6	0.7	0.9	1.3	0.5	1	1	1.2	1.5	2.2
Loss Uniformity (MAX, dB)	0.6	0.8	1	1.4	1.7	2.7	0.8	1.4	1.7	2	2.2	2.7
Directivity (dB)	55	55	55	55	55	55	55	55	55	55	55	55
Operating Temp. (°C)	-40 ~ +85											
Storage Temp. (°C)	-40 ~ +85											

Notes:
(1) All parameters above are tested with APC connectors.
(2) All parameters above are same for G.652D, G.657A1, G.657A2 fibers.

Part Number Generator

Type	Configuration	Wavelength	Package Style	Input Connectors	Output Connectors	Fibre Type
PSM						
PLC Splitter Module						

Configuration	
102	1x2
104	1x4
108	1x8
116	1x16
132	1x32
164	1x64
202	2x2
204	2x4
208	2x8
216	2x16
232	2x32
264	2x64

Wavelength	
A	1310/1550nm
B	1310/1490/1550nm
C	Broadband 1260-1625nm

Package Style	
A	1U 19” fixed
B	2U 19” fixed
C	3U 19” fixed
D	1U 19” sliding
E	2U 19” sliding
F	3U 19” sliding
G	1U LGX
H	2U LGX
I	3U LGX
J	1U pivot

Input Connectors	
A	None
B	E2000/UPC
C	E2000/APC
D	FC/UPC
E	FC/APC
F	LC/UPC
G	LC/APC
H	MU/APC
I	MU/UPC
J	SC/UPC
K	SC/APC
L	ST/UPC

Output Connectors	
A	None
B	E2000/UPC
C	E2000/APC
D	FC/UPC
E	FC/APC
F	LC/UPC
G	LC/APC
H	MU/APC
I	MU/UPC
J	SC/UPC
K	SC/APC
L	ST/UPC

Fibre Type	
D	G652D
A	G657A

Example Part Number

PSM	1x16	A	A	G	G	D

This part number generator has created a:

1x16, 1U 19” fixed panel with LC/APC connectors, using G652D fibre