

Montclair provides a full line of Telcordia compliant (GR-1209 & GR-1221) passive optical PLC (Planar Lightwave Circuit) splitters to support a number of different FTTx network topologies.

For the inside plant or the extreme outside plant environment, Montclair has a PLC splitter that combines superior optical performance with robust packaging to ensure long-term reliability and stability. Montclair splitters feature very low insertion loss, exceptional port-to-port uniformity, bend insensitive fiber for reduced loss, and an operating temperature range of -40 to +85 °C including cable jacketing material.

PLC splitters are available in several different standard housing options which include small-form, ruggedized cassette, LGX® module, and rack-mount. Customized packaging is offered to accommodate your special requests.

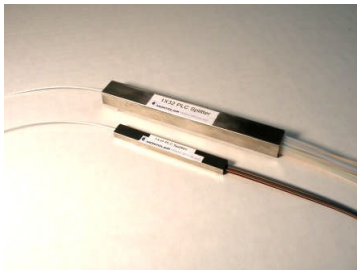
Features

- Telcordia GR-1209 & GR-1221 compliant
- Telcordia GR-326 compliant
- Jacketing material rated to -40 to +85 °C operating temperature
- Bend insensitive G657A fiber
- Low Insertion loss and PDL
- High reliability and stability
- Available in zero water peak fiber

Applications

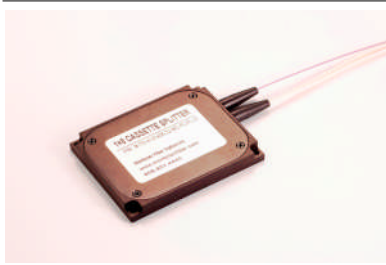
- FTTx PON / GPON / GePON
- Access networks
- CATV
- RFoG

Passive component



Small-form

900um loose tube output cable over 250um fiber (top);
250um output ribbon fiber (bottom) (pictured)



Ruggedized cassette

1x4 cassette with 900um loose tube input / output fibers (pictured)



LGX® module

1x8 LGX® module with SC/APC simplex adapters (pictured)



Rack-mount

1x32 rack-mount 1U with SC/APC simplex adapters (pictured)

Performance specifications

| Parameters | Port configuration | | | | | | | | | | | | |
|-------------------------|--|-----|-----|------|------|------|------|-----|-----|------|------|------|--|
| | 1x2 | 1x3 | 1x4 | 1x8 | 1x16 | 1x32 | 1x64 | 2x2 | 2x4 | 2x8 | 2x16 | 2x32 | |
| Operating wavelength nm | 1260 ~ 1650 | | | | | | | | | | | | |
| Insertion loss max. dB | 3.7 | 7.0 | 7.1 | 10.4 | 13.6 | 17.0 | 20.3 | 4.2 | 7.5 | 11.0 | 14.5 | 17.5 | |
| Uniformity max. dB | 0.6 | 0.8 | 0.8 | 1.0 | 1.1 | 1.3 | 1.8 | 1.2 | 1.5 | 1.6 | 2.0 | 2.5 | |
| PDL max. dB | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | |
| Return loss min. dB | 50 | | | | | | | | | | | | |
| Directivity min. dB | 55 | | | | | | | | | | | | |
| Operating temp. °C | -40 ~ +85 | | | | | | | | | | | | |
| Storage temp. °C | -40 ~ +85 | | | | | | | | | | | | |
| Fiber type | Singlemode / compliant to G.652.D (Low Water Peak) & G.657.A (bend-improved); Available in zero-water peak Output fiber color code per TIA/EIA 598-B | | | | | | | | | | | | |

NOTE: Typical values shown measured without connectors

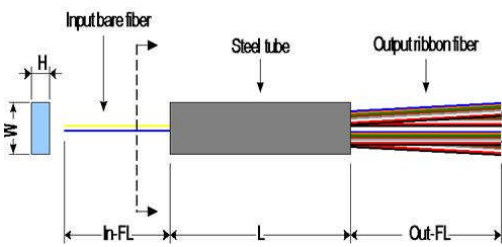
Packaging dimensions

| Packaging type | Port configuration | | | | | | | | | | | | | |
|----------------------------|--------------------|-----|-----|----------|-----------------|----------------|----------|-----------------------|---------|-----|----------|-------------------|------------|--|
| Packaging dim. in mm | 1x2 | 1x3 | 1x4 | 1x8 | 1x16 | 1x32 | 1x64 | 2x2 | 2x4 | 2x8 | 2x16 | 2x32 | | |
| Small-form (HxWxL) | | | | | | | | | | | | | | |
| Ribbon direct output (R) | 4x4x40 | | | 4x7x55 | | | 4x12x60 | 4x5x45 | | | 4x7x55 | | | |
| Ribbon/900um fanout (L) | 4x4x40 | | | 4x7x55 | | | 4x12x60 | 4x5x45 | | | 4x7x55 | | | |
| 900um direct output (9) | 4x7x60 | | | 6x19x100 | | | 6x40x120 | 4x7x70 | | | 6x19x100 | | | |
| Ruggedized cassette | 8x80x100 | | | | 16x80 x135.4 | 18x114 x140 | request | 8x80x100 | | | | 18x114x140 | | |
| LGX® module (HxDxW) | | | | | | | | | | | | | | |
| with adapters | 129x125x28 | | | | 129x 125x56 | 129x 125x84 | request | 129x125x28 (2x2, 2x4) | | | | 129x125x56 (2x16) | | |
| with 2.0mm fiber cable | 129x125x28 | | | | 129x 125x28 | 129x 125x28 | request | 129x125x28 (2x8) | | | | 129x125x84 (2x32) | | |
| Rack-mount (WxDxH) | request | | | | 482x230x44 | | | 482x 230x88 | request | | | | 482x230x44 | |

NOTE: Packaging dimensions shown above are standard; Splitters are available in a variety of custom configurations and sizes upon request

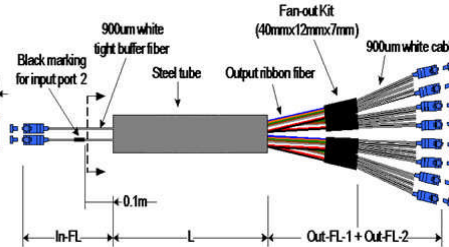
Small-form packaging options

Ribbon direct output (R):



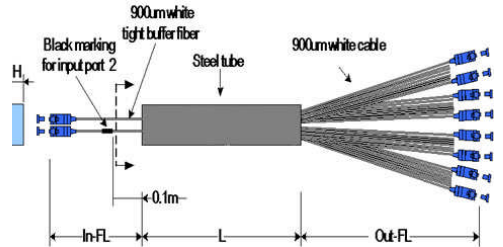
Input: 900um loose tube cable over 250um fiber
Outputs: 250um ribbon fiber

Ribbon to 900um fanout (L):



Input: 900um loose tube cable over 250um fiber
Outputs: 250um ribbon fiber to 900um loose tube cable over 250um fiber

900um direct output (9):



Input: 900um loose tube cable over 250um fiber
Outputs: 900um loose tube cable over 250um fiber

NOTE: Output fiber color code per TIA/EIA 598-B

Passive component

Ordering information

To order PLC splitters choose (p/n code in bold):

1. Port configuration
2. Packaging type
3. Adapter / connector type for in & out ports
4. In & out fiber length (meters)
5. Packaging type (for small-form only)
6. Fiber cable type options (for cassette, LGX, and rack-mount only)

Note: prefix and suffix form one p/n

PLC p/n prefix:

M - TD - P - ① X ① - 60 - ② -

① Port configuration:

- 01 X 02**
- 01 X 03**
- 01 X 04**
- 01 X 08**
- 01 X 16**
- 01 X 32**
- 01 X 64**
- 02 X 02**
- 02 X 04**
- 02 X 08**
- 02 X 16**
- 02 X 32**

'60' designates 1260 ~ 1650nm operating wavelength

NOTE:

Splitters can be ordered in a variety of custom packaging configurations and sizes.

Please call 608.831.4440 or email info@montclairfiber.com with your special requests.

② Packaging type:

- S** Small-form
- C** Cassette
- M** LGX module
- R** Rack-mount

Small-form p/n suffix:

③ - ④ / ④ - ⑤

Cassette p/n suffix:

③ / ③ - ④ - ⑥

LGX & Rack-mount p/n suffix:

③ / ③ - ④ - ⑥

③ Adapter / connector type for in & out ports:

- ALC** LC/APC
- LCU** LC/UPC
- ASC** SC/APC
- SCU** SC/UPC
- PL** Pigtail (for fiber input/outputs)

④ In & out fiber length (meters):

0.5 ~ 5

⑤ Packaging type (for small-form only):

- R** 250um ribbon direct output fiber
- L** 250um ribbon fiber to 900um loose-tube cable over 250um fiber
- 9** 900um loose-tube cable over 250um fiber

⑥ Fiber cable type options (for cassette, LGX, and rack-mount only):

- 9um** 900um loose-tube cable
- 2mm** 2.0mm diameter cable
- 3mm** 3.0mm diameter cable

4 & 6 use only when ordering LGX & rack-mounts with input / output fiber cables