

# MPO Passive Optical Splitter Modules

## A Complete Line of Splitter Modules for FTTx Applications

### Product Description

The MPO optical splitter module family provides a unique plug and play solution to the needs of today's FTTx networks. Combining the optical splitter expertise of Furukawa Electric with the connectivity and packaging capabilities of OFS, the MPO splitter module offers superior performance in a flexible and easy-to-manage package.

The use of MPO fanouts simplifies cable management by decreasing installation time and providing a flexible solution. The MPO fanout structure allows for rapid hot swapping of modules for future upgrade to high bandwidth WDM or re-proportioned split ratios. The connectorized module also reduces time consuming documentation and re-routing in the future – the modules make it simple to remove 5 connectors and swap out the module.

Designed for demanding FTTx installations, Furukawa Electric's PLC splitters provide low loss, wideband performance. Splitter modules are packaged in robust cassettes that plug into a standard LGX® Fiber Management panel opening.

The LC or SC interface on the input takes advantage of the outstanding low loss performance of the OFS connectors, while the MPO connector provides high-density connectivity on the output side.

The combination of low loss splitters and connector interfaces maximizes link lengths. When used with OFS AllWave® ZWP fiber in an Access ADVANTAGE™ System, network operators can offer triple play functionality at extended distances in a cost effective package.

Take advantage of years of knowledge behind the PLC device! Over 40,000 PLCs produced by Furukawa Electric using Flame Hydrolysis Deposition (FHD) production technology. FHD helps keep the water out and is suitable for outside plant.



MPO Splitter Module

### Features and Benefits:

- Modular approach provides cost effective incremental growth
  - ◆ Improves and simplifies fiber routing
- The PLC splitters are Telcordia GR-1221-CORE, GR-1209-CORE tested
  - ◆ Support industry standard applications
  - ◆ Long term reliability assurance
- Low insertion loss and reflectance
  - ◆ Support high-speed applications
  - ◆ Support longer link lengths
- Solution-based engineering support to meet all FTTx networking requirements
  - ◆ Offer unique designs and configurations
  - ◆ Customer specific application engineering
- Universal solution
  - ◆ Simplified stocking/replacement inventory

## MPO Splitter Module

The OFS MPO splitter module is available in multiple configurations to meet customer requirements. The OFS splitters also utilize FHD technology, insuring better thermal stability. Designed to meet the demanding requirements of both inside and outside plant applications, the splitter module meets Telcordia GR-1221-CORE and GR-1209-CORE requirements.

The 8 fiber MPO interface on the module output allows customers to minimize the number of cable sheaths exiting the module, simplifying cable management. Fanout lengths can be ordered based on individual engineering requirements, limiting the amount of slack that needs to be accommodated in a restricted amount of space.



### 1x32 Splitter Module Specifications:

Operating Wave Length:	1260-1625 nm	
Max Insertion Loss With Connectors (max.):	17.20 dB	
Average Insertion Loss (Avg) <sup>1</sup> :	16.30 dB	
PDL (max.):	0.3 dB	
Return Loss (min.) <sup>2</sup> :	50 dB	
Directivity (min.) <sup>2</sup> :	50 dB	
Operating temperature:	Min. -40°C	Max. 75°C
Storage temperature:	Min. -40°C	Max. 85°C

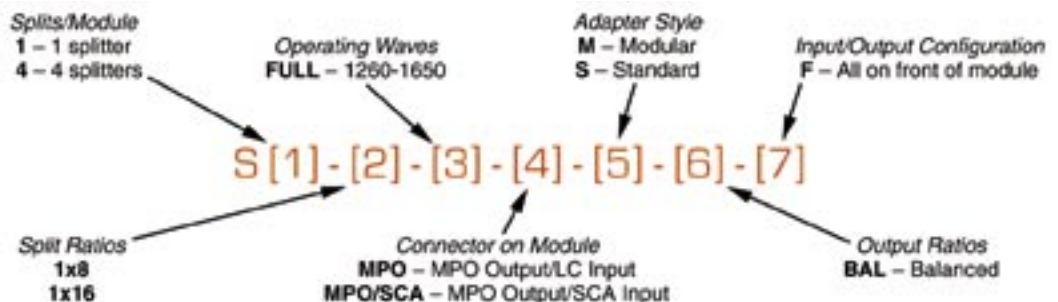
Footnotes: <sup>1</sup> With Connectors  
<sup>2</sup> Without Connectors

### Splitter Module Ordering Information:

Comcode	Product Code	Description
300449345	S1-1X16-FULL-MPO-S-BAL-F	1x16 PLC Full Spectrum 1310 thru 1650 MPO Module, LCA Input
300449352	S1-1X32-FULL-MPO-S-BAL-F	1x32 PLC Full Spectrum 1310 thru 1650 MPO Module, LCA Input
300467917	S4-1X8-FULL-MPO-S-BAL-F	Quad 1x8 PLC Full Spectrum 1310 thru 1650 MPO Module, LCA Input
TBD	S1-1X16-FULL-MPO/SCA-S-BAL-F	1x16 PLC Full Spectrum 1310 thru 1650 MPO Module, SCA Input
TBD	S1-1X32-FULL-MPO/SCA-S-BAL-F	1x32 PLC Full Spectrum 1310 thru 1650 MPO Module, SCA Input

### Splitter Module Ordering Scheme:

**Examples:** S1-1X8-FULL-MPO/SCA-S-BAL-F  
 S4-1X8-FULL-MPO/SCA-S-BAL-F  
 S1-1X32-FULL-MPO/SCA-S-BAL-F

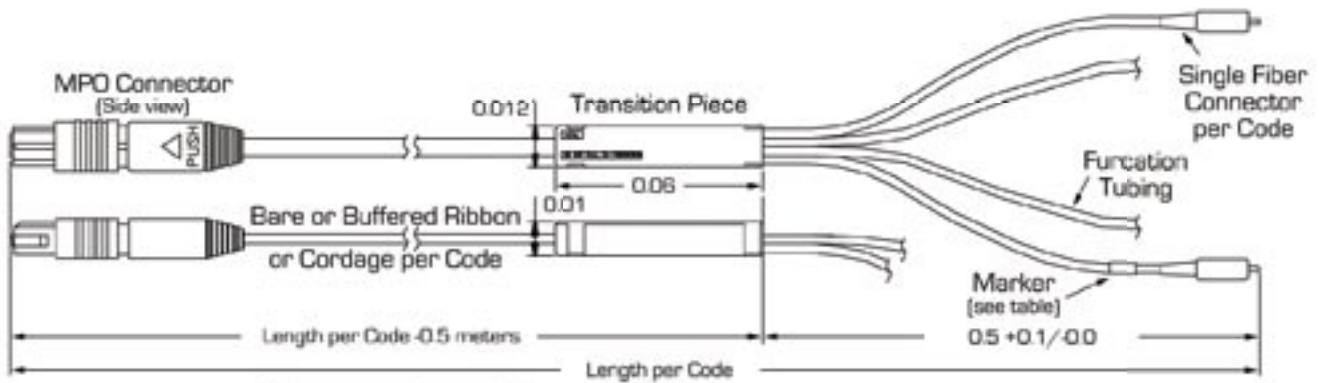
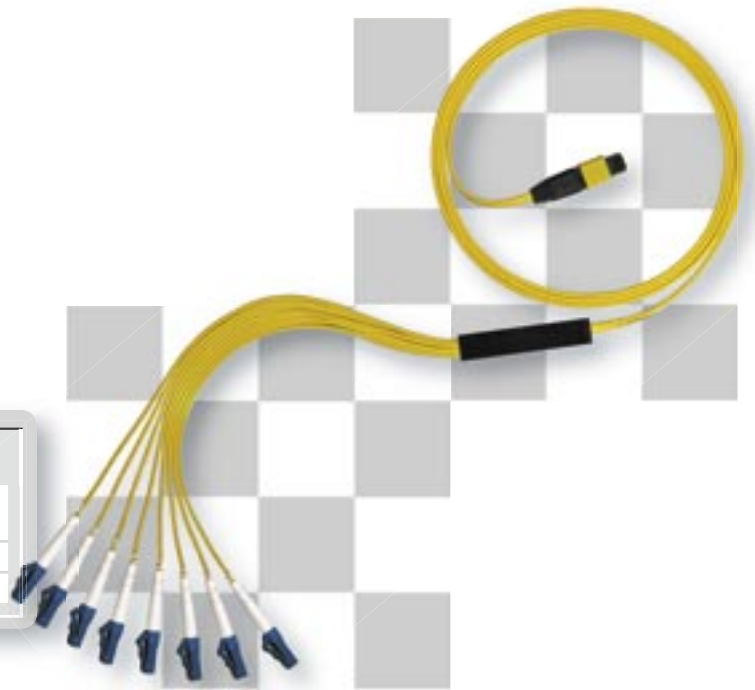


## MPO Fanouts

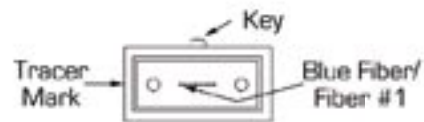
The OFS MPO fanouts provide reliable, high-quality transitions to individual fiber connection ports. They are available with FC, SC, ST and LC connectors, and offer low insertion loss and reflectance.

### MPO Fanout Specifications:

Connector Type	Ferrule/Polish	Loss (Typical)	Loss (Max)	Return Loss (Min)
MPO	Single-Mode Low Loss 8-Fiber APC	0.16 dB	0.35 dB	55 dB
Single Fiber	Single-Mode UPC	0.20 dB	0.50 dB	50 dB
Single Fiber	Single-Mode APC	0.30 dB	0.50 dB	50 dB



Fiber Number (Wire Marker)	Fiber Color
1	Blue
2	Orange
3	Green
4	Brown
5	Slate
6	White
7	Red
8	Black



### MPO Fanout Ordering Scheme:

**Example:** MPO8TAPC/LCAPC-LL/TCF-3M

1. Single Fiber Connector Type: FC – FC connector  
SC – SC connector  
ST – ST connector  
LC – LC connector

**MPO8UAPC / [1] [2] - LL / TCF - [3] M**

2. Polishing Method for Single Fiber Connector: UPC – UPC polish (flat ferrule)  
APC – Angled PC polish (angled ferrule)

3. Cable Length (in meters)



For additional information please contact your sales representative. You can also visit our website at <http://www.ofsoptics.com> or call 1-888-fiberhelp.

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