



Fiber Optic Splitter Modules

PLC 2 to 64 Ports Single/Dual Input

Features

- 1x2 to 1x64 standard split ratios
- 2x2 to 2x64 for redundancy and test access
- Wideband performance
- Low insertion loss
- Low back reflection
- High output uniformity
- Stable optical performance
- Bend resistant fiber G.657A2 compliant
- SC/APC, LC/APC, SC or LC connectors

Application

The Planar Lightwave Circuit (PLC) splitter modules are designed to fit the Hexatronic Fiber Distribution Hubs (FDH) 1/NBD 116 200 and 2/NBD 116 200. It can also be used with 19" splitter frames NBA 30104, 05 in Central Office applications (centralized splitters). The module provides uniform division of an optical signal from one or two input fiber ports multiple output ports. The splitters are designed to meet the requirements for a wide range of fiber optic communications systems like in PON FTTx networks.

Low loss under extreme environmental conditions ensures stable operation. The compact packages equipped with bendresistant pre-connected fiber makes them especially suitable for fast and incremental installation in compact FDH cabinets.

Design

1 x n and 2 x n PLC splitters utilize silica on silica optical waveguide technology. PLC splitters enable thermally stable, compact packages with wideband performance.

The splitters are available in configurations with single fiber input from 1x2 to 1x64 as well as with dual fiber inputs 2x2 to 2x32. The pre connected cables has an outer diameter of 1.6 mm.

Two types are available:

- 1 Short tail, 180 mm (input) / n x730 mm (output) pre-terminated ends
- 2 Long tail, 900 mm (input) / n x1500 mm (output) pre-terminated ends

Product Information

The Splitter module housing is made of Poly Carbonate (PC).

All materials are RoHS approved.

Dimensions (DxWxH): 80 x 10 x 125 mm. (splitters =< n x 32)

Dimensions (DxWxH): 80 x 20 x 125 mm. (splitters = n x 64)

Technical Information

Product Color	Light grey
Temperature, Operation [°C]	-40 to +85
Temperature, Storage [°C]	-40 to +85
Temperature, Installation [°C]	-20 to +50
Fiber Type	G657A1
Return Loss, min [dB]	55

Conformance

Telcordia GR-1209, GR-1221
 IEC 67153-031-3/-6.
 IEC 61754-4
 IEC 61754-6
 IEC 61754-20
 ITU-T G.657 A
 ITU-T G.671 (1:16 and 1:32 splitters)
 RoHS

Technical Notes

Operating Wavelength: 1260 ~ 1360, 1450 ~ 1650 nm
Maximum input power: 500mW

Installation Notes

Note that the splitters are available in two main configurations with long tail or short tail and with single fiber input or dual fiber input. Choose the right type for your application or ask Hexatronic for advice.

Technical Details

Split ratio	Insertion Loss (max) dB	Uniformity* (max) dB	PDL (max) dB
1:2	4.0	0.6	<0.3
1:4	7.4	0.8	<0.3
1:8	10.7	1.0	<0.3
1:16	13.9	1.3	<0.3
1:24	16.5	1.6	<0.3
1:32	17.0	1.8	<0.4
1:64	21.5	2.5	<0.4
2:2	4.3	0.9	<0.4
2:4	7.6	1.5	<0.4
2:8	11.0	1.7	<0.4
2:16	14.5	2.1	<0.4
2:32	18.0	2.5	<0.4
2:64	21.9	3.0	<0.4

*Including wavelength dependent loss, polarization dependent loss and temperature dependent loss defined by the operation wavelength band and the operation temperature range.

Configuration Chart

Articles 122

Article name	Color	Layout	Dimensions [mm]	Weight [kg/km]	Length [m]
SPLM 1:4, SC/APC, 900/1500 RDJ901200/1	Light grey	1x4	90 × 10 × 126	0.9	900/1500
SPLM 1:8, SC, 900/1500 RDJ901200/10	Light grey	1x8	90 × 10 × 126	0.91	900/1500
SPLM 1:8, LC/APC, 900/1500 RDJ901200/11	Light grey	1x8	90 × 10 × 126	0.91	900/1500
SPLM 1:8, LC, 900/1500 RDJ901200/12	Light grey	1x8	90 × 10 × 126	0.91	900/1500
SPLM 1:16, SC/APC, 180/730 RDJ901200/13	Light grey	1x16	90 × 10 × 126	0.5	180/730
SPLM 1:16, SC, 180/730 RDJ901200/14	Light grey	1x16	90 × 10 × 126	0.95	180/730
SPLM 1:16, LC/APC, 180/730 RDJ901200/15	Light grey	1x16	90 × 10 × 126	0.95	180/730
SPLM 1:16, LC, 180/730 RDJ901200/16	Light grey	1x16	90 × 10 × 126	0.95	180/730
SPLM 1:16, SC/APC, 900/1500 RDJ901200/17	Light grey	1x16	90 × 10 × 126	0.38	900/1500
SPLM 1:16, SC, 900/1500 RDJ901200/18	Light grey	1x16	90 × 10 × 126	0.96	900/1500
SPLM 1:16, LC/APC, 900/1500 RDJ901200/19	Light grey	1x16	90 × 10 × 126	0.4	900/1500
SPLM 1:4, SC, 900/1500 RDJ901200/2	Light grey	1x4	90 × 10 × 126	0.9	900/1500
SPLM 1:16, LC/UPC, 900/1500 RDJ901200/20	Light grey	1x16	90 × 10 × 126	0.96	900/1500
SPLM 1:24, SC/APC, 180/730 RDJ901200/21	Light grey	1x24	90 × 10 × 126	1	180/730
SPLM 1:24, SC, 180/730 RDJ901200/22	Light grey	1x24	90 × 10 × 126	1	180/730
SPLM 1:24, LC/APC, 180/730 RDJ901200/23	Light grey	1x24	90 × 10 × 126	1	180/730
SPLM 1:24, LC, 180/730 RDJ901200/24	Light grey	1x24	90 × 10 × 126	1	180/730
SPLM 1:24, SC/APC, 900/1500 RDJ901200/25	Light grey	1x24	90 × 10 × 126	1.01	900/1500
SPLM 1:24, SC, 900/1500 RDJ901200/26	Light grey	1x24	90 × 10 × 126	1.01	900/1500
SPLM 1:24, LC/APC, 900/1500 RDJ901200/27	Light grey	1x24	90 × 10 × 126	0.38	900/1500
SPLM 1:24, LC, 900/1500 RDJ901200/28	Light grey	1x24	90 × 10 × 126	1.01	900/1500
SPLM 1:32, SC/APC, 180/730 RDJ901200/29	Light grey	1x32	90 × 10 × 126	0.29	180/730
SPLM 1:32 SC/APC 180/730 mark green RDJ901200/291	Light grey	1x32	90 × 10 × 126	0.29	180/730

Article name	Color	Layout	Dimensions [mm]	Weight [kg/km]	Length [m]
SPLM 1:32 SC/APC 180/730 mark brown RDJ901200/292	Light grey	1x32	90 × 10 × 126	0.29	180/730
SPLM 1:32 SC/APC 180/730 mark Gray RDJ901200/293	Light grey	1x32	90 × 10 × 126	0.29	180/730
SPLM 1:4, LC/APC, 900/1500 RDJ901200/3	Light grey	1x4	90 × 10 × 126	0.9	900/1500
SPLM 1:32, SC, 180/730 RDJ901200/30	Light grey	1x32	90 × 10 × 126	1.08	180/730
SPLM 1:32, LC/APC, 180/730 RDJ901200/31	Light grey	1x32	90 × 10 × 126	0.4	180/730
SPLM 1:32 LC/APC 180/730 mark green RDJ901200/311	Light grey	1x32	90 × 10 × 126	0.4	180/730
SPLM 1:32 LC/APC 180/730 mark brown RDJ901200/312	Light grey	1x32	90 × 10 × 126	0.4	180/730
SPLM 1:32 LC/APC 180/730 mark brown RDJ901200/313	Light grey	1x32	90 × 10 × 126	0.4	180/730
SPLM 1:32, LC, 180/730 RDJ901200/32	Light grey	1x32	90 × 10 × 126	1.08	180/730
SPLM 1:32, SC/APC, 900/1500 RDJ901200/33	Light grey	1x32	90 × 10 × 126	0.55	900/1500
SPLM 1:32 SC/APC 900/1500 mark gree RDJ901200/331	Light grey	1x32	90 × 10 × 126	0.55	900/1500
SPLM 1:32 SC/APC 900/1500 mark brow RDJ901200/332	Light grey	1x32	90 × 10 × 126	0.55	900/1500
SPLM 1:32 SC/APC 900/1500 mark Gray RDJ901200/333	Light grey	1x32	90 × 10 × 126	0.55	900/1500
SPLM 1:32 SC/APC 900/1500 mark whit RDJ901200/334	Light grey	1x32	90 × 10 × 126	0.55	900/1500
SPLM 1:32 SC/APC 900/1500 mark red RDJ901200/335	Light grey	1x32	90 × 10 × 126	0.55	900/1500
SPLM 1:32 SC/APC 900/1500 mark blac RDJ901200/336	Light grey	1x32	90 × 10 × 126	0.55	900/1500
SPLM 1:32 SC/APC 900/1500 mark yell RDJ901200/337	Light grey	1x32	90 × 10 × 126	0.55	900/1500
SPLM 1:32 SC/APC 900/1500 mark viol RDJ901200/338	Light grey	1x32	90 × 10 × 126	0.55	900/1500
SPLM 1:32 SC/APC 900/1500 mark turq RDJ901200/339	Light grey	1x32	90 × 10 × 126	0.55	900/1500
SPLM 1:32, LC/APC, 1500/2500 RDJ901200/135	Light grey	1x32	90 × 10 × 126	1.1	900/1500
SPLM 1:32, SC, 900/1500 RDJ901200/34	Light grey	1x32	90 × 10 × 126	1.1	900/1500
SPLM 1:32, LC/APC, 900/1500 RDJ901200/35	Light grey	1x32	90 × 10 × 126	0.4	900/1500
SPLM 1:32, LC, 900/1500 RDJ901200/36	Light grey	1x32	90 × 10 × 126	1.1	900/1500
SPLM 1:64, SC/APC, 180/730 RDJ901200/37	Light grey	1x64	90 × 20 × 126	1.38	180/730
SPLM 1:64, SC, 180/730 RDJ901200/38	Light grey	1x64	90 × 20 × 126	1.38	180/730

Article name	Color	Layout	Dimensions [mm]	Weight [kg/km]	Length [m]
SPLM 1:64, LC/APC, 180/730 RDJ901200/39	Light grey	1x64	90 × 20 × 126	1.38	180/730
SPLM 1:4, LC, 900/1500 RDJ901200/4	Light grey	1x4	90 × 10 × 126	0.9	900/1500
SPLM 1:64, LC, 180/730 RDJ901200/40	Light grey	1x64	90 × 20 × 126	1.38	180/730
SPLM 1:64, SC/APC, 900/1500 RDJ901200/41	Light grey	1x64	90 × 20 × 126	1.4	900/1500
SPLM 1:64, SC, 900/1500 RDJ901200/42	Light grey	1x64	90 × 20 × 126	1.4	900/1500
SPLM 1:64, LC/APC, 900/1500 RDJ901200/43	Light grey	1x64	90 × 20 × 126	1.4	900/1500
SPLM 1:64, LC, 900/1500 RDJ901200/44	Light grey	1x64	90 × 20 × 126	1.4	900/1500
SPLM 2:4, SC/APC, 900/1500 RDJ901200/45	Light grey	2x4	90 × 10 × 126	0.9	900/1500
SPLM 2:4, SC, 900/1500 RDJ901200/46	Light grey	2x4	90 × 10 × 126	0.9	900/1500
SPLM 2:4, LC/APC, 900/1500 RDJ901200/47	Light grey	2x4	90 × 10 × 126	0.9	900/1500
SPLM 2:4, LC, 900/1500 RDJ901200/48	Light grey	2x4	90 × 10 × 126	0.9	900/1500
SPLM 2:8, SC/APC, 180/730 RDJ901200/49	Light grey	2x8	90 × 10 × 126	0.92	180/730
SPLM 1:8, SC/APC, 180/730 RDJ901200/5	Light grey	1x8	90 × 10 × 126	0.9	180/730
SPLM 2:8, SC, 180/730 RDJ901200/50	Light grey	2x8	90 × 10 × 126	0.92	180/730
SPLM 2:8, LC/APC, 180/730 RDJ901200/51	Light grey	2x8	90 × 10 × 126	0.92	180/730
SPLM 2:8, LC, 180/730 RDJ901200/52	Light grey	2x8	90 × 10 × 126	0.92	180/730
SPLM 2:8, SC/APC, 900/1500 RDJ901200/53	Light grey	2x8	90 × 10 × 126	0.92	900/1500
SPLM 2:8, SC, 900/1500 RDJ901200/54	Light grey	2x8	90 × 10 × 126	0.92	900/1500
SPLM 2:8, LC/APC, 900/1500 RDJ901200/55	Light grey	2x8	90 × 10 × 126	0.92	900/1500
SPLM 2:8, LC, 900/1500 RDJ901200/56	Light grey	2x8	90 × 10 × 126	0.92	900/1500
SPLM 2:16, SC/APC, 180/730 RDJ901200/57	Light grey	2x16	90 × 10 × 126	0.95	180/730
SPLM 2:16, SC, 180/730 RDJ901200/58	Light grey	2x16	90 × 10 × 126	0.95	180/730
SPLM 2:16, LC/APC, 180/730 RDJ901200/59	Light grey	2x16	90 × 10 × 126	0.95	180/730
SPLM 1:8, SC, 180/730 RDJ901200/6	Light grey	1x8	90 × 10 × 126	0.9	180/730
SPLM 2:16, LC, 180/730 RDJ901200/60	Light grey	2x16	90 × 10 × 126	0.95	180/730

Article name	Color	Layout	Dimensions [mm]	Weight [kg/km]	Length [m]
SPLM 2:16, SC/APC, 900/1500 RDJ901200/61	Light grey	2x16	90 × 10 × 126	0.96	900/1500
SPLM 2:16, SC, 900/1500 RDJ901200/62	Light grey	2x16	90 × 10 × 126	0.96	900/1500
SPLM 2:16, LC/APC, 900/1500 RDJ901200/63	Light grey	2x16	90 × 10 × 126	0.96	900/1500
SPLM 2:16, LC, 900/1500 RDJ901200/64	Light grey	2x16	90 × 10 × 126	0.96	900/1500
SPLM 2:32, SC/APC, 180/730 RDJ901200/65	Light grey	2x32	90 × 10 × 126	1.1	180/730
SPLM 2:32, SC, 180/730 RDJ901200/66	Light grey	2x32	90 × 10 × 126	1.1	180/730
SPLM 2:32, LC/APC, 180/730 RDJ901200/67	Light grey	2x32	90 × 10 × 126	0.4	180/730
SPLM 2:32, LC, 180/730 RDJ901200/68	Light grey	2x32	90 × 10 × 126	1.1	180/730
SPLM 2:32, SC/APC, 900/1500 RDJ901200/69	Light grey	2x32	90 × 10 × 126	0.38	900/1500
SPLM 1:8, LC/APC, 180/730 RDJ901200/7	Light grey	1x8	90 × 10 × 126	0.9	180/730
SPLM 2:32, SC, 900/1500 RDJ901200/70	Light grey	2x32	90 × 10 × 126	1.13	900/1500
SPLM 2:32, LC/APC, 900/1500 RDJ901200/71	Light grey	2x32	90 × 10 × 126	1.13	900/1500
SPLM 2:32, LC, 900/1500 RDJ901200/72	Light grey	2x32	90 × 10 × 126	1.13	900/1500
SPLM 2:64, SC/APC, 180/730 RDJ901200/73	Light grey	2x64	90 × 20 × 126	1.4	180/730
SPLM 2:64, SC, 180/730 RDJ901200/74	Light grey	2x64	90 × 20 × 126	1.4	180/730
SPLM 2:64, LC/APC, 180/730 RDJ901200/75	Light grey	2x64	90 × 20 × 126	1.4	180/730
SPLM 2:64, LC, 180/730 RDJ901200/76	Light grey	2x64	90 × 20 × 126	1.4	180/730
SPLM 2:64, SC/APC, 900/1500 RDJ901200/77	Light grey	2x64	90 × 20 × 126	1.4	900/1500
SPLM 2:64, SC, 900/1500 RDJ901200/78	Light grey	2x64	90 × 20 × 126	1.4	900/1500
SPLM 2:64, LC/APC, 900/1500 RDJ901200/79	Light grey	2x64	90 × 20 × 126	1.4	900/1500
SPLM 1:8, LC, 180/730 RDJ901200/8	Light grey	1x8	90 × 10 × 126	0.9	180/730
SPLM 2:64, LC, 900/1500 RDJ901200/80	Light grey	2x64	90 × 20 × 126	1.4	900/1500
SPLM 1:2, SC/APC, 180/730 RDJ901200/81	Light grey	1x2	90 × 10 × 126	0.5	180/730
SPLM 1:2, SC, 180/730 RDJ901200/82	Light grey	1x2	90 × 10 × 126	0.9	180/730
SPLM 1:2, LC/APC, 180/730 RDJ901200/83	Light grey	1x2	90 × 10 × 126	0.9	180/730

Article name	Color	Layout	Dimensions [mm]	Weight [kg/km]	Length [m]
SPLM 1:2, LC, 180/730 RDJ901200/84	Light grey	1x2	90 × 10 × 126	0.9	180/730
SPLM 1:2, SC/APC, 900/1500 RDJ901200/85	Light grey	1x2	90 × 10 × 126	0.5	900/1500
SPLM 1:2, SC, 900/1500 RDJ901200/86	Light grey	1x2	90 × 10 × 126	0.9	900/1500
SPLM 1:2, LC/APC, 900/1500 RDJ901200/87	Light grey	1x2	90 × 10 × 126	0.9	900/1500
SPLM 1:2, LC, 900/1500 RDJ901200/88	Light grey	1x2	90 × 10 × 126	0.9	900/1500
SPLM 2:2, SC/APC, 180/730 RDJ901200/89	Light grey	2x2	90 × 10 × 126	0.9	180/730
SPLM 1:8, SC/APC, 900/1500 RDJ901200/9	Light grey	1x8	90 × 10 × 126	0.38	900/1500
SPLM 2:2, SC, 180/730 RDJ901200/90	Light grey	2x2	90 × 10 × 126	0.9	180/730
SPLM 2:2, LC/APC, 180/730 RDJ901200/91	Light grey	2x2	90 × 10 × 126	0.9	180/730
SPLM 2:2, LC, 180/730 RDJ901200/92	Light grey	2x2	90 × 10 × 126	0.9	180/730
SPLM 2:2, SC/APC, 900/1500 RDJ901200/93	Light grey	2x2	90 × 10 × 126	0.9	900/1500
SPLM 2:2, SC, 900/1500 RDJ901200/94	Light grey	2x2	90 × 10 × 126	0.9	900/1500
SPLM 2:2, LC/APC, 900/1500 RDJ901200/95	Light grey	2x2	90 × 10 × 126	0.9	900/1500
SPLM 2:2, LC, 900/1500 RDJ901200/96	Light grey	2x2	90 × 10 × 126	0.9	900/1500
SPLM 1:8, SC/APC, 900/3000 RDJ901200/97	Light grey	1x8	90 × 10 × 126	1.1	900/3000
SPLM 1:8, SC+8FC, 3.6/9.1M RDJ901200/100	Light grey	1x8	90 × 10 × 126	1.6	3600/9000
SPLM 1:8, SC+8FC, 3.6/12.5M RDJ901200/101	Light grey	1x8	90 × 10 × 126	1.6	3600/12500
SPLM 1:16, SC+16FC, 3.6/6M RDJ901200/102	Light grey	1x16	90 × 10 × 126	1.6	3600/6000
SPLM 1:16, SC+16FC, 3.6/9.1M RDJ901200/103	Light grey	1x16	90 × 10 × 126	1.6	3600/9100
SPLM 1:32, SC+32FC, 3.6/6M RDJ901200/105	Light grey	1x16	90 × 10 × 126	1.6	3600/6000
SPLM 1:32, SC+32FC, 3.6/9.1M RDJ901200/106	Light grey	1x16	90 × 10 × 126	1.6	3600/9100
SPLM 1:8, SC+8FC, 3.6/6M RDJ901200/99	Light grey	1x8	90 × 10 × 126	1.4	3600/6000
RDJ Plastic Patch Module, LC, 8F Simplex ENPP-ORPCH MOD1-BLP	—	—	—	—	—
SPLM 1:32, SC/APC, 900/1500 MARK YELLOW RDJ901200/337R2B	—	—	—	—	—