

PLC Splitters

ISP/OSP Planar Lightwave Circuit



Product Description:

Planar Lightwave Circuit (PLC) Splitters with the following options:

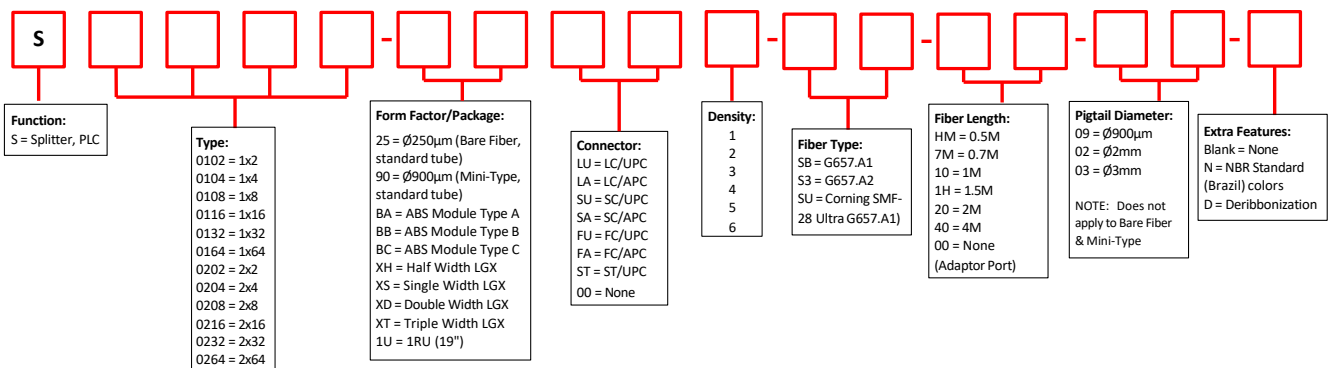
- 1XN or 2XN, Bare Fiber, Mini-Type, ABS Module, LGX Cassette
- 1RU Form Factor
- UPC/APC Connectors
- Variable Input/Output Lengths

Applications:

- PON Networks
- FTTX Systems
- CATV Links
- Optical Signal Distribution



Product Ordering Information



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Part Number / Description Examples

Part Number	Bare Fiber Type Description
S0104-25001-SB-1H	PLC Optical Splitter, 1x4, Single, Ø250um Bare Fiber with standard tube, G.657.A1 fiber, 1.5M legs, Unconnectorized

S0108-25001-SB-1H	PLC Optical Splitter, 1x8, Single, Ø250um Bare Fiber with standard tube, G.657.A1 fiber, 1.5M legs, Unconnectorized
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Part Number	Mini-Type Description
S0104-90001-SB-1H	PLC Optical Splitter, 1x4, Single, Ø900um Mini-Type with standard tube, G.657.A1 fiber, 1.5M legs, Unconnectorized

S0108-90001-SB-1H	PLC Optical Splitter, 1x8, Single, Ø900um Mini-Type with standard tube, G.657.A1 fiber, 1.5M legs, Unconnectorized
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Part Number	ABS Module Type Description
S0108-BALU1-SB-20-02	PLC Optical Splitter, 1x8, Single, ABS Module Type A (100x80x10mm), LC/UPC Connectors, G.657.A1 fiber, 2M x Ø2mm pigtails

S0116-BB001-SB-10	PLC Optical Splitter, 1x16, Single, ABS Module Type B (120x80x18mm), G.657.A1 fiber, no pigtails
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Part Number	LGX Cassette Type Description
S0116-XSLU1-SB-10-02	PLC Optical Splitter, 1x16, LGX Single width, LC/UPC Connectors, Corning SMF-28 Ultra G.657.A1 fiber, 1M x Ø2mm pigtails

S0108-XSSA1-SB-00	PLC Optical Splitter, 1x8, LGX Single width, SC/APC Connectors, G.657.A1 fiber
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Part Number	1RU Rackmount Type Description
S0164-1ULU1-SU-00	PLC Optical Splitter, 1x64, Single, 1RU (19") Width, LC/UPC Connectors, Corning SMF-28 Ultra G.657.A1 fiber

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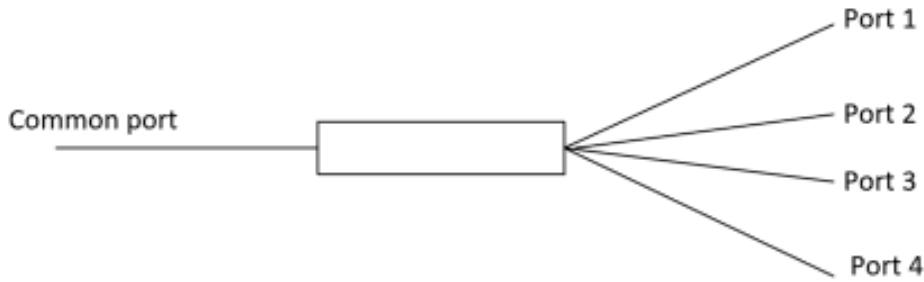
Optical Characteristics

Parameter	1XN	2xN	Unit
Operating Wavelength	1260 - 1650	1260 - 1650	nm
Insertion Loss	< 3.8 (1x2)	< 3.9 (2x2)	dB
	< 7.2 (1x4)	< 7.3 (2x4)	
	< 10.3 (1x8)	< 10.5 (2x8)	
	< 13.5 (1x16)	< 14.4 (2x16)	
	< 16.5 (1x32)	< 17.4 (2x32)	
	< 20.5 (1x64)	< 21.0 (2x64)	
	< 23.8 (1x128)	< 24.5 (2x128)	
Loss Uniformity	< 0.4 (1x2)	< 0.6 (2x2)	dB
	< 0.6 (1x4)	< 1.0 (2x4)	
	< 0.8 (1x8)	< 1.2 (2x8)	
	< 1.0 (1x16)	< 1.5 (2x16)	
	< 1.5 (1x32)	< 1.8 (2x32)	
	< 2.0 (1x64)	< 2.2 (2x64)	
	< 2.5 (1x128)	< 2.5 (2x128)	
Directivity	> 55	> 55	dB
Return Loss	> 55	> 55	dB
Wavelength Dependent Loss	< 0.5 (1x2/4/8/16)	< 0.5 (2x2/4/8/16)	dB
	< 1.0 (1x32/64/128)	< 1.0 (2x32/64/128)	
Polarization Dependent Loss	< 0.2 (1x2/4/8)	< 0.2 (2x2/4/8)	nm
	< 0.3 (1x16/32)	< 0.3 (2x16/32)	
	< 0.4 (1x64/128)	< 0.4 (2x64/128)	
IL Thermal Stability	< 0.5	< 0.5	(dB/°C)
Maximum Input Power	500/27	500/27	(mW/dBm)
Operating Temperature	-20 to +80	-20 to +80	(°C)
Operating Humidity	5 to 95	5 to 95	(%)
Fiber Type (all ports)	G.657.A1 (UOS)	G.657.A1 (UOS)	

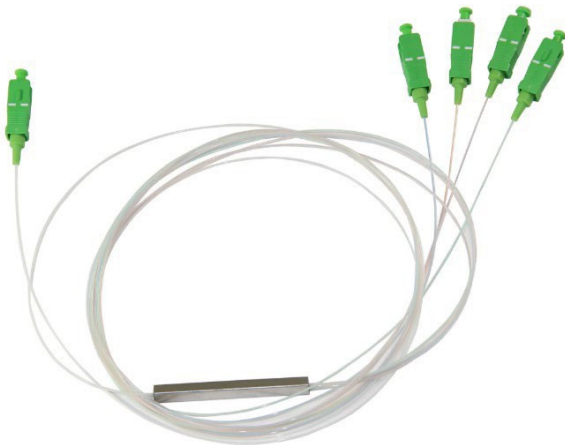
PLC Splitters

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Splitter Design



1 x 4 Splitter Design



Example: a) 1 x 4 Mini-Type PLC Splitter



b) 1 x 8 ABS Module PLC Splitter

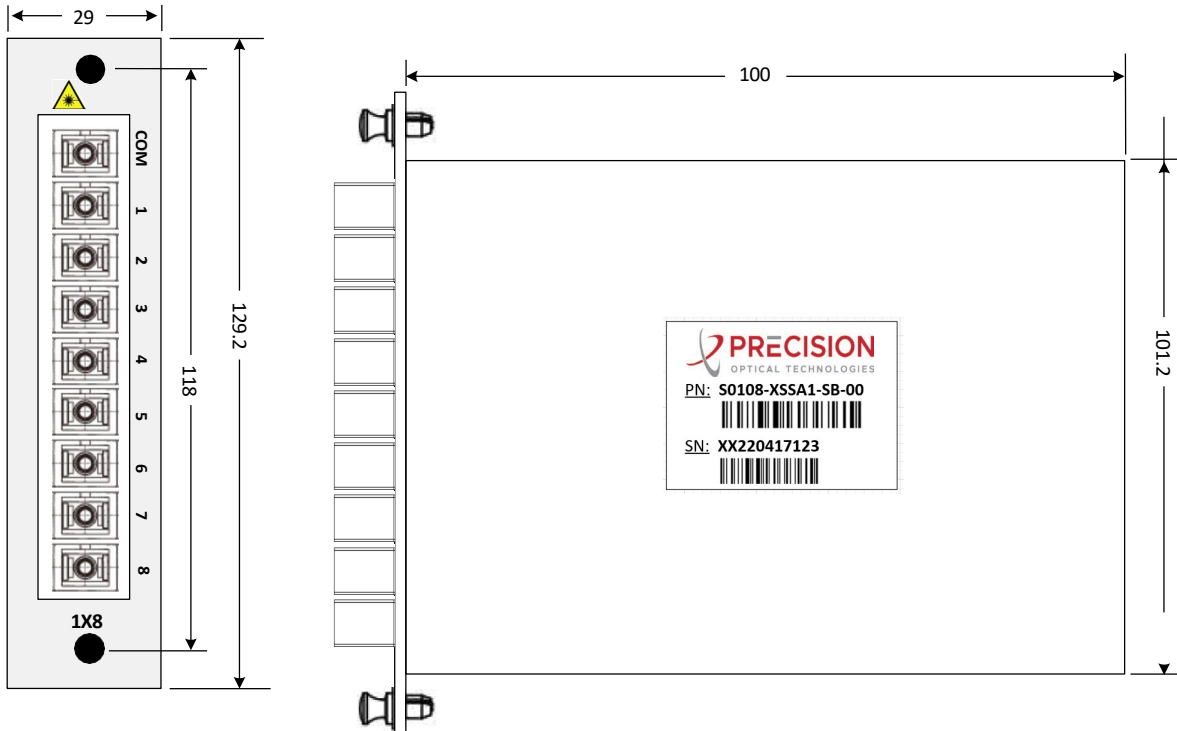
Standard Sizes By Splitter Type											
Bare/Mini-Type	1x2	1x4	1x8	1x16	1x32	1x64	2x2	2x4	2x8	2x16	2x32
Tube Size (mm)	40x4x4			50x7x4		60x12x4	50x4x4			60x7x4	
ABS Type	1x2	1x4	1x8	1x16	1x32	1x64	2x2	2x4	2x8	2x16	2x32
Module Size (mm)	100x80x10 (A)			120x80x18 (B)		140x115x18 (C)	100x80x10 (A)			120x80x18 (B)	
LGX Type	1x2	1x4	1x8	1x16	1x32	1x64	2x2	2x4	2x8	2x16	2x32
w/ SC Connectors	XS			XD	XT	Custom	XS			XD	XT
w/ LC Connectors	XS			XD	XT	XS			XD		

PLC Splitter Design Standards

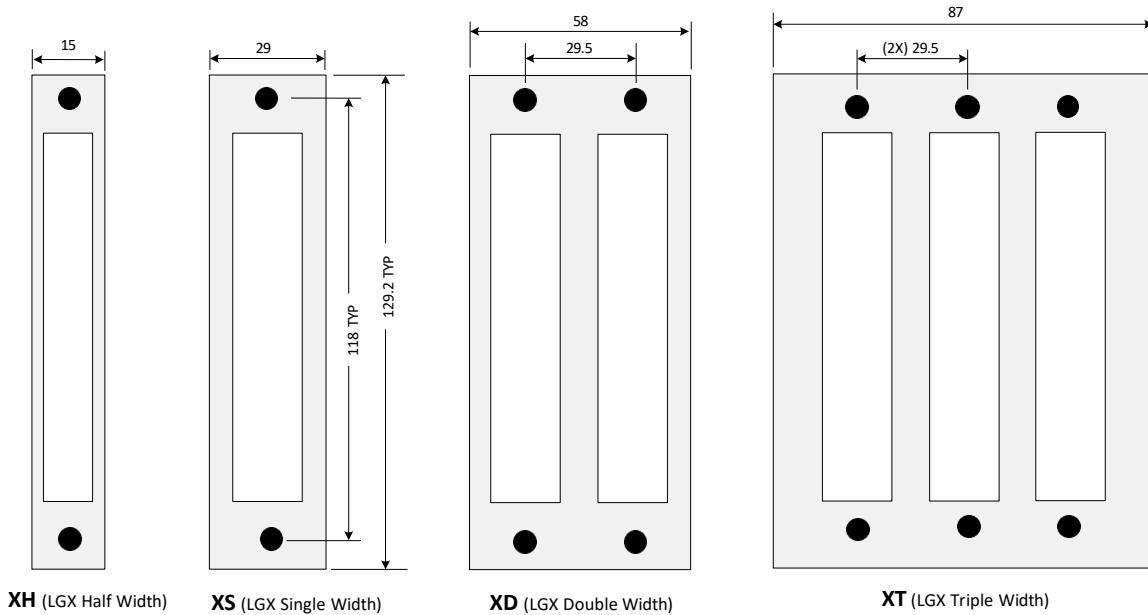
PLC Splitters

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External Design



LGX External Dimensions in mm
(P/N S0108-XSSA1-SB-00 shown)



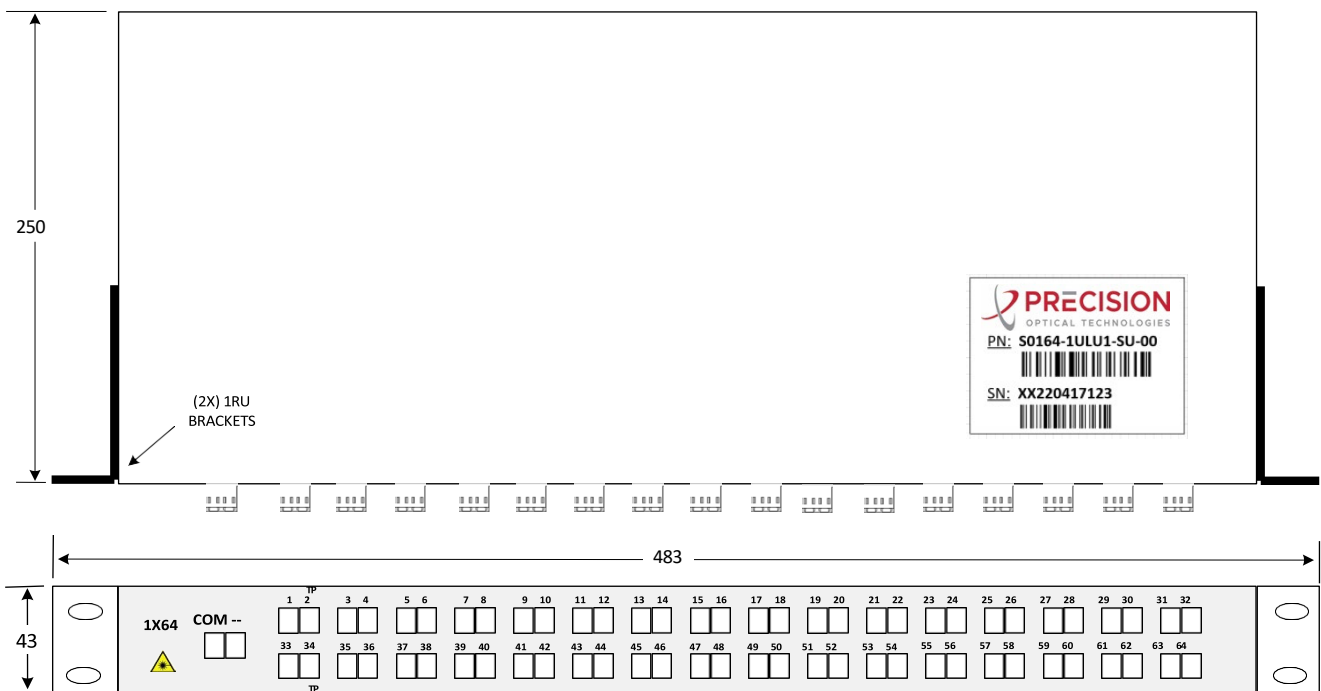
LGX Faceplate Dimensions in mm

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Example: 1 x 16 1RU PLC Splitter with SC/APC Connectors



1RU Splitter External Dimensions in mm
 (P/N S0164-1ULU1-SU-00 shown)