LP-F31XX
PLC Optical Splitter

Features:

- ☐ Low insertion loss.

- ☐ Fan-out type/Non Fan-out type.

- ☐ High return loss and excellent uniformity.

- ☐ Low Polarization dependent loss.

- ☐ Environmental stable.

- ☐ Operation wavelength: 1260nm to 1650nm.

- ☐ SC/LC/ST/FC connector types.

- ☐ Up to 2x64 splitters available.

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PLC Optical Splitter

LanPro PLC (Planar Lightwave Circuits) splitters are developed using silica glass waveguide circuits and aligned fiber pigtails, integrated inside a miniature package. PLC splitters provide low-cost solution for optical signal distribution, with small form factor and superb reliability.

Optical splitters are main FTTH products which can be provided from the chip to the module. Single mode 1xN & 2xN splitter divides uniformly optical signals from input ports to multiple outputs. Splitters can also be operated in the reverse direction to combine multiple wavelengths into one or two fibers.

A Application:

- FTTx systems.
- Optical LAN, Metro, WAN networks.
- Passive optical networks (ATM, WDM, Ethernet).
- CATV networks.
- Data communications.

B **Specification:**
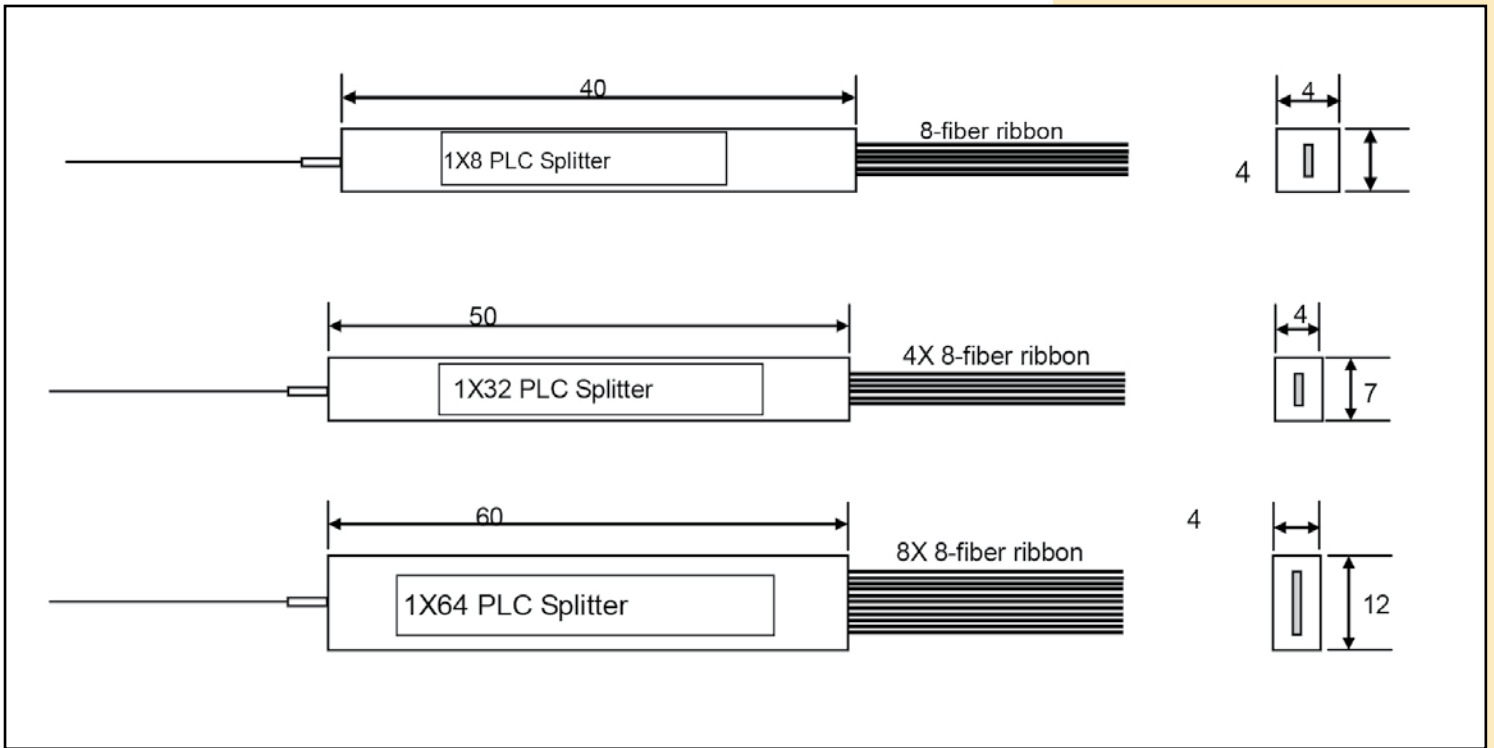
Table 1 – 1×N PLC optical splitter (without connector)

Parameters	1×2	1×4	1×8	1×16	1×32	1×64
Operating wavelength (nm)	1260~1650					
Fiber type	G657A or other under request					
Insertion Loss (dB) (S/P)	≤3.8	≤7.5	≤10.5	≤13.6	≤17.0	≤20.2
Uniformity (Max., dB)	≤0.6	≤0.6	≤1.0	≤1.0	≤1.3	≤1.8
Return Loss(dB) (S/P)	≥55	≥55	≥55	≥55	≥55	≥55
Polarization dependent loss (dB)	≤0.2	≤0.2	≤0.3	≤0.3	≤0.3	≤0.3
Directivity (dB)	≥55	≥55	≥55	≥55	≥55	≥55
Operating Temperature (°C)	-40~85					
Storage temperature(°C)	-40~85					

Table 2 – 2×N PLC Optical Splitter (without connector)

Parameters	2×2	2×4	2×8	2×16	2×32
Operating wavelength (nm)	1260~1650				
Fiber type	G657A or other request				
Insertion Loss (dB)(S/P)	≤4.4	≤7.6	≤11.0	≤14.3	≤17.5
Uniformity (Max., dB)	≤0.8	≤1.0	≤1.0	≤1.5	≤1.8
Return loss(dB) (S/P)	≥55	≥55	≥55	≥55	≥55
Polarization dependent loss (dB)	≤0.3	≤0.3	≤0.3	≤0.3	≤0.3
Directivity (dB)	≥55	≥55	≥55	≥55	≥55
Operating Temperature (°C)	-40~85				
Storage temperature (°C)	-40~85				

C **Outside dimension:**

PLC Capsule Module device Ribbon Fiber

PLC Capsule Module device Loose Fiber

PLC Box Module device

100x80x10

120x80x18

140x115x18
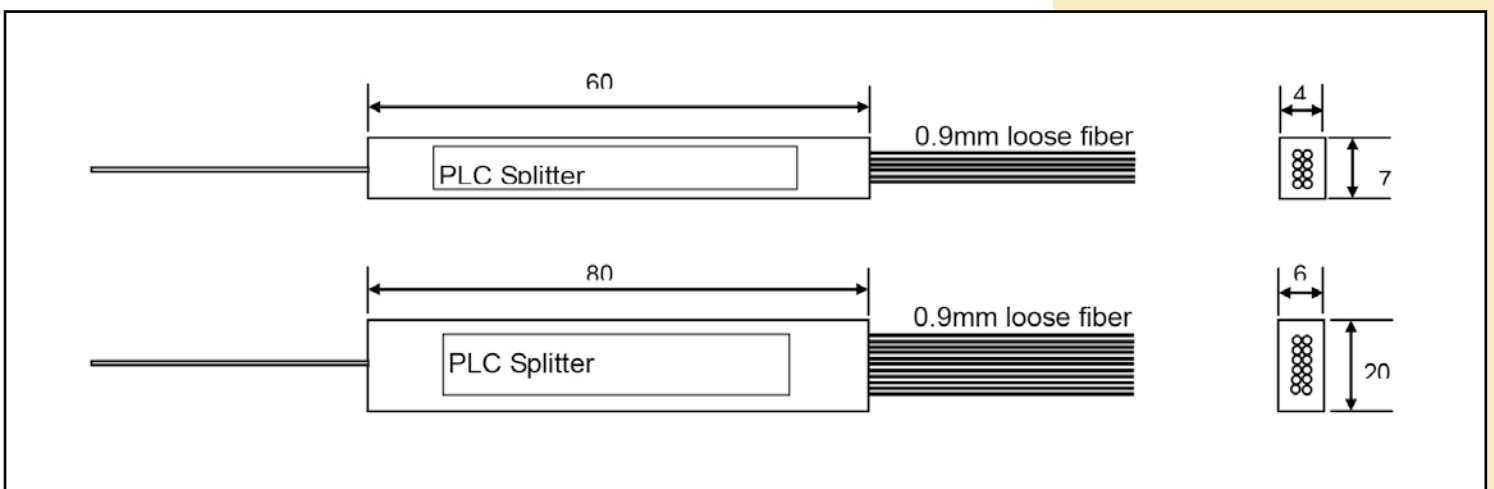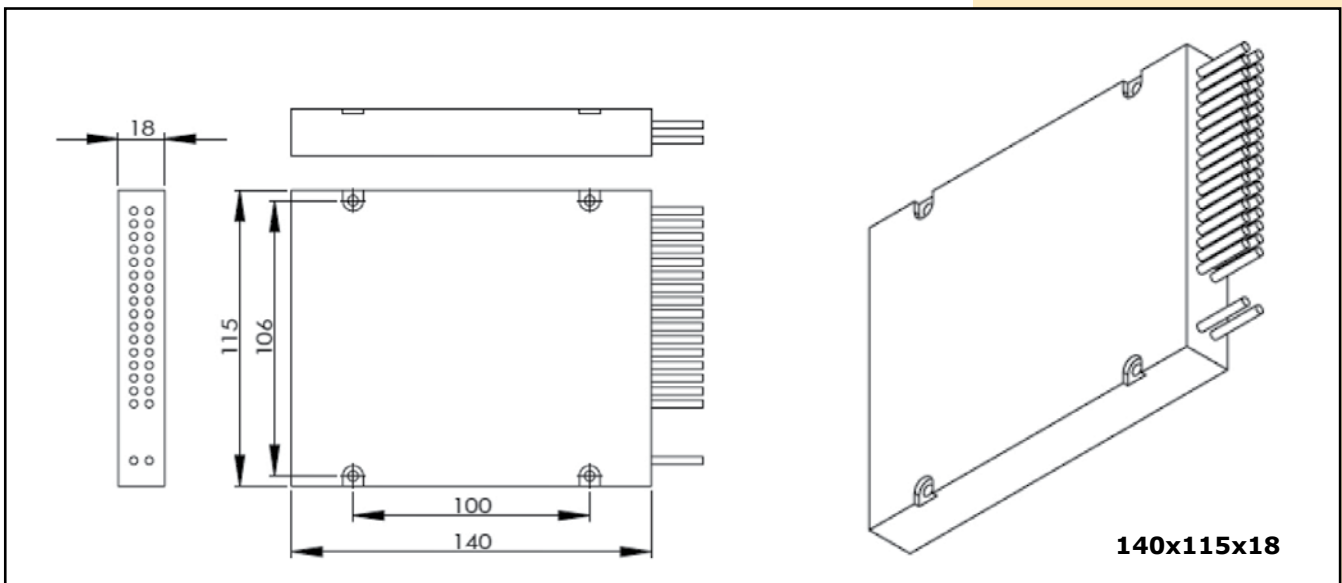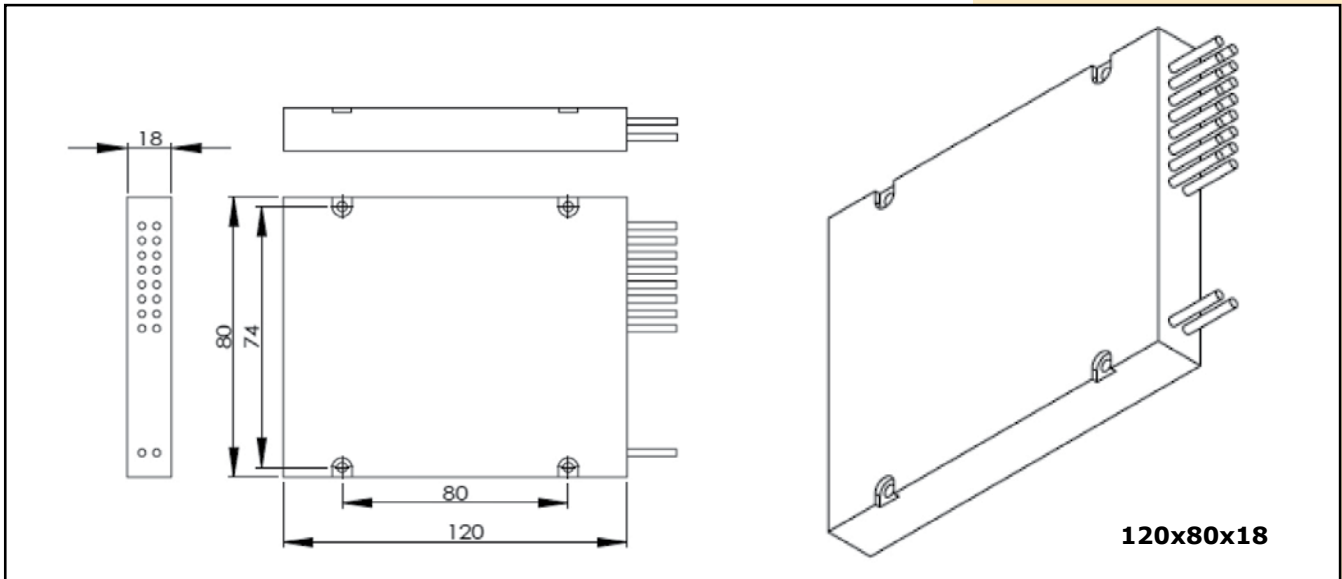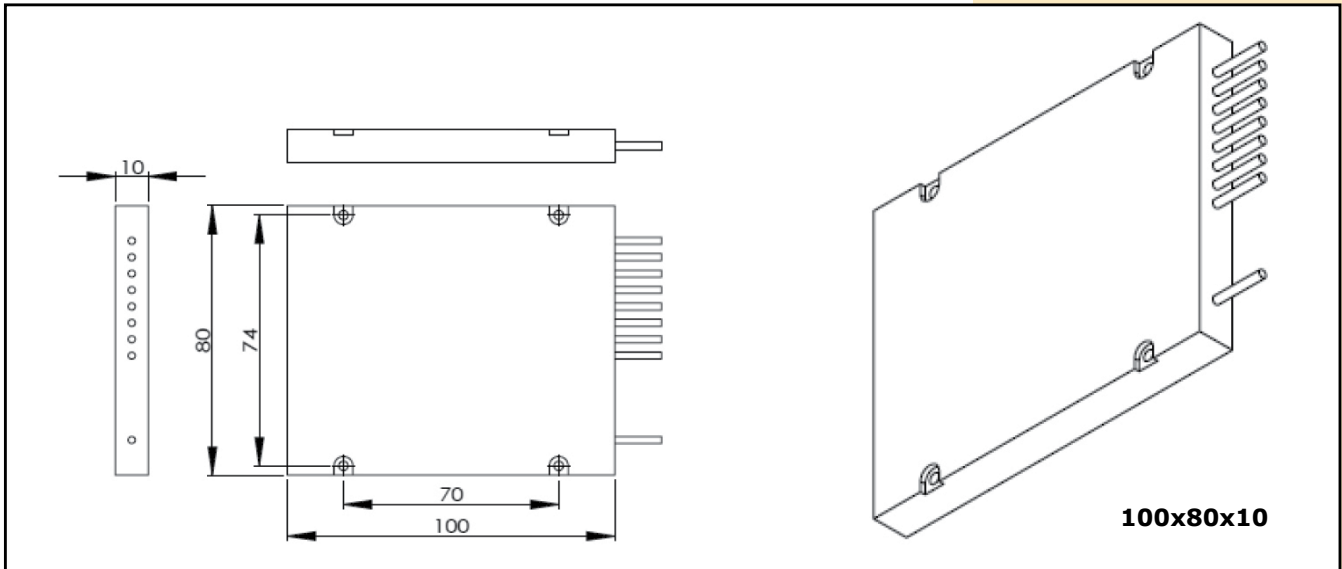
D How to Order:

LP-F31SITOOTF

LP-F31	S	I
PLC Optical splitter	**Splitter Type** **A** PLC Capsule module **B** PLC Box Module **C** PLC Unifiber Panel Module	**Inputs** **1** Input **2** Inputs **3** Inputs **4** Inputs

T	OO	T	F
Input Connector type **0** No Connector **1** SC APC **2** SC UPC **3** LC APC **4** LC UPC **5** FC APC **6** FC UPC	**Outputs** **02** 2 Outputs **04** 4 Outputs **08** 8 Outputs **16** 16 Outputs **32** 32 Outputs **64** 64 Outputs	**Output Connector type** **0** No Connector **1** SC APC **2** SC UPC **3** LC APC **4** LC UPC **5** FC APC **6** FC UPC	**Fiber type** **R** Ribbon fiber **L** Loose fiber

Examples:

LP-F31A10020L	LanPro PCL splitter capsule Module 1:2, without connectors, Singlemode G657 Loose Fiber.
LP-F31B11041R	LanPro PCL splitter box module 1:4, Input SC APC, Output SC APC connectors, Singlemode G657 Ribbon fiber.