## SLANPRO

## Fiber Solutions - Optical Fiber Patch Cords & Pigtails

### LP-F13L10S1021L3M

Duplex Optical Patch Cord LC Duplex Blue color connector UPC polish, RL>50dB to SC Simplex Blue color connector UPC polish, RL>50dB, SM G657A2/B2 9/125um, 3.0mm, Yellow jacket, LSZH 3m length, Standard long boot

LPF13L10S1021L3M\_SS\_ENB01W



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LanPro's G657A2/B2 Patch Cords offers the interface between distribution cables and active optical equipment. This is a Vital link!

Patch cords can be offered in simplex and duplex cable types in SM technology.

From 1/2m to several hundred meters under request.

Bend insensitive fibers meeting G.657A2/B2 provide low light loss and tight bend radius in server rooms, data rooms and tight cabinets. Factory-terminated connectors are designed to meet stringent mechanical specifications for most interconnect applications.

LanPro's patch cords are designed specially for building back bone and passive optical LAN installations.

Fibers are backward compatible with G.652D fibers for easy splicing.

#### Features

Low insertion loss and back reflection loss.

Excellent mechanical endurance.

Good in repeatability.

#### Application

Telecommunications.

CATV, LAN, MAN, WAN, Test &Measurement.

Military industry.

Medical.

A Specifications LC/UPC				
Specification	Fiber Type (each Connector)	SC/APC	SC/UPC	LC/UPC
Attenuation (dB) Typical	Singlemode	0.3	0.3	0.3
Reflection (dB) Typical	Singlemode	-65	-45	-45
Operating temperature	Singlemode	-20°C ~+75°C	-20°C ~+75°C	-20°C ~+75°C
Storage temperature	Singlemode	-20°C ~+75°C	-20°C ~+75°C	-20°C ~+75°C

# B Specifications SC/UPC

Specification	Fiber Type (each Connector)	SC/APC	SC/UPC	LC/UPC
Attenuation (dB) Typical	Singlemode	0.3	0.3	0.3
Reflection (dB) Typical	Singlemode	-65	-45	-45
Operating temperature	Singlemode	-20°C ~+75°C	-20°C ~+75°C	-20°C ~+75°C
Storage temperature	Singlemode	-20°C ~+75°C	-20°C ~+75°C	-20°C ~+75°C

## How to order:

## LP-FXXTP0TP0CCJLLLB

LP-F	Lan	LanPro Fiber Optic Patch Cords		
хх	12:	Simplex Optical patch cords		
	13:	Duplex Optical patch cords		
Conne	ctor t	ype both ends		
	0:	None		
	T:	ST Simplex		
	G:	FC Typical type Simplex disassembled		
	E:	E2000 Simplex		
	К:	E2000 Duplex		
т	F:	FC Simplex		
- <b>1</b> -1	S:	SC Simplex		
	<b>C:</b>	SC Duplex		
	<b>P:</b>	LC Simplex		
	L:	LC Duplex		
	M:	MTRJ Female		
	N:	MTRJ with Guide Pin Male		
Polish	Polish grade both ends			
	0:	None (pigtail)		
Р	1:	UPC polish, RL>50dB Blue Color Connector		
	2:	APC polish, RL>60dB Green Color Connector		
	3:	PC Polish , RL > 20dB Blue Color Connector		
	4:	SPC polish, RL>40dB Blue Color Connector		
0:	Optio	onal		

Cable	Type	
cable	1	Multimode OM1 62.5/125 µm, 3.0mm, simplex cable, orange jacket
	01:	
	03:	Multimode OM1 62.5/125 µm, 0.9mm, simplex cable, orange jacket
	04:	Singlemode B1.3 9/125 µm, 3.0mm, simplex cable, Yellow jacket
	05:	Singlemode B1.3 9/125 µm, 0.9mm, simplex cable, Yellow jacket
	06:	Singlemode B1.3 9/125 µm, 0.9mm, simplex cable, White jacket
	07:	Multimode OM1 62.5/125 µm, 3.0mm, zipcord cable, orange jacket
	08:	Singlemode B1.3 9/125 µm, 3.0mm, zipcord cable, Yellow jacket
	09:	Multimode OM2 50/125 µm, 3.0mm, simplex cable, orange jacket
	10:	Multimode OM2 50/125 µm, 0.9mm, simplex cable, orange jacket
	11:	Multimode OM1 62.5/125 µm, 0.9mm, simplex cable, White jacket
	12:	Multimode OM1 62.5/125 µm, 2.0mm, simplex cable, orange jacket
	13:	Multimode OM2 50/125 μm, 2.0mm, simplex cable, orange jacket
	14:	Singlemode B1.3 9/125 µm, 2.0mm, simplex cable, Yellow jacket
	<b>16</b> :	Multimode OM1 62.5/125 µm, 3.0mm, MTRJ dualan cable, orange jacket
	17:	Singlemode G657A2 9/125 µm, 0.9mm, simplex cable, Yellow jacket
	18:	Multimode OM2 50/125 $\mu$ m, 0.9mm, simplex cable, White jacket
	19:	Singlemode G657A2 9/125 $\mu$ m, 0.9mm, simplex cable, White jacket
	20:	Singlemode G657A2 9/125 µm, 1.8mm, zipcord cable, Yellow jacket
	21:	Singlemode G657A2 9/125 µm, 3.0mm, zipcord cable, Yellow jacket
	22:	Singlemode G655 9/125 µm, 0.9mm, zipcord cable, Yellow jacket
	23:	Multimode OM1 62.5/125 µm, 2.0mm, zipcord cable, orange jacket
СС	24:	Singlemode B1.3 9/125 µm, 2.0mm, zipcord cable, Yellow jacket
	25:	Singlemode G657 A2 9/125 $\mu$ m, 2.0mm, zipcord cable, Yellow jacket
	<b>26:</b>	Multimode OM1 62.5/125 $\mu$ m, 1.8mm, zipcord cable, orange jacket
	27:	Singlemode B1.3 9/125 µm, 2.0mm, Mini-zipcord cable, Yellow jacket
	28:	Multimode OM3 50/125 $\mu$ m, 0.9mm, simplex cable, White jacket
	29:	Singlemode G655 9/125 $\mu$ m, 0.9mm, simplex cable, White jacket
	30:	Singlemode G655 9/125 µm, 1.8mm, simplex cable, Yellow jacket
	31:	Singlemode G655 9/125 µm, 2.0mm, zipcord cable, Yellow jacket
	32:	Singlemode G655 9/125 µm, 3.0mm, zipcord cable, Yellow jacket
	34:	Multimode OM2 50/125 µm, 0.9mm, simplex cable, gray jacket
	35:	Multimode OM2 50/125 µm, 3.0mm, zipcord cable, orange jacket
	<b>40</b> :	Multimode OM4 50/125 $\mu$ m, 0.9mm, simplex cable, White jacket
	42:	Multimode OM3 50/125 µm, 3.0mm, zipcord cable, gray jacket
	44:	Multimode OM3 50/125 μm, 3.0mm, MTRJ dualan cable, gray jacket
	45:	Multimode OM3 50/125 µm, 2.0mm, zipcord cable, gray jacket
	<b>46:</b>	Multimode OM3 50/125 µm, 1.8mm, Mini-zipcord cable, gray jacket
	47:	Multimode OM3 50/125 µm, 0.9mm, simplex cable, gray jacket
	55:	Multimode OM4 50/125 μm, 3.0mm, zipcord cable, gray jacket
	60:	Multimode OM4 50/125 μm, 0.9mm, simplex cable, gray jacket
	65:	Multimode OM3 50/125 µm, 3.0mm, simplex cable, aqua jacket laser optimized 10 GIG
	66:	Multimode OM3 50/125 µm, 0.9mm, simplex cable, aqua jacket laser optimized 10 GIG
	67:	Multimode OM3 50/125 µm, 3.0mm, zipcord cable, aqua jacket laser optimized 10 GIG

	<u> </u>	
Cable		
	<b>68:</b>	Multimode OM3 50/125 $\mu$ m, 2.0mm, simplex cable, aqua jacket laser optimized 10 GIG
	69:	Multimode OM3 50/125 µm, 3.0mm, MTRJ dualan cable, aqua jacket, laser optimized 10 GIG
	70:	Multimode OM3 50/125 µm, 2.0mm, zipcord cable, aqua jacket laser optimized 10 GIG
	71:	Multimode OM3 50/125 µm, 1.8mm, Mini-zipcord cable, aqua jacket laser optimized 10 GIG
	76:	Multimode OM4 50/125 µm, 3.0mm, simplex cable, aqua jacket laser optimized 10 GIG
СС	77:	Multimode OM4 50/125 µm, 0.9mm, simplex cable, aqua jacket laser optimized 10 GIG
	78:	Multimode OM4 50/125 µm, 3.0mm, zipcord cable, aqua jacket laser optimized 10 GIG
	79:	Multimode OM4 50/125 µm, 2.0mm, simplex cable, aqua jacket laser optimized 10 GIG
	80:	Multimode OM4 50/125 µm, 3.0mm, MTRJ dualan cable, aqua jacket laser optimized 10 GIG
	81:	Multimode OM4 50/125 µm, 2.0mm, zipcord cable, aqua jacket laser optimized 10 GIG
	82:	Multimode OM4 50/125 µm, 1.8mm, Mini-zipcord cable, aqua jacket laser optimized 10 GIG
Cable	Jacket ty	
	P:	PVC Jacket
J	L:	LSZH Jacket
	R:	OFNR
Lengt	h	
	10M:	Meter
LLL	10F:	Feet
Boot 1		
	Blanco:	Standard long boot
В	1:	Bendable boot
	2:	Short boot

## **Examples:**

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## Technical Note

### LanPro Network's G657A2 patch cords and pigtails:

G652D and G657A2 specifications refer to the core and cable construction of optical fibre and are generally the fibres of choice in optical fibre patch on SM (singlemode) systems.

ITU-T G652D singlemode fibres have been used in all networks for more than 30 years. G652D is the common standard of the industry for the everyday application. Being backwards compatible, this makes for easier maintenance/repair (splicing fibres of the same type). The G652D fibre Mode Field Diameter is 10.4µm @1550nm.

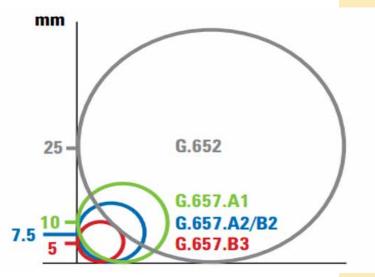
G652D (specially OS2 type) fibres provide marginally lower loss transmission, which is better in facilitating long distance communication links (up to and greater than 100km).

However, G652D fibres have limited bend resistance. Yes, you can NOT bend like a maniac man. This will not work well.

G657A2 fibres is the answer to your problems. They are used in advanced access cable network installation, where higher bend capability is required for smaller cable jointing pits and also allows for cable and hardware miniaturization.

G657A2 fibres are fully compatible with G652D fibres. The G657A2 fibre Mode Field Diameter is 9.8µm@1550nm. Splice losses are slightly higher when splicing the two different fibres together. Just slightly.

G657A2 fibre has greater resistance to bending (macrobend) losses (see figure below), and facilitating low-cost deployment techniques.



This picture above shows Relevant Bending radius for G652D and G657A2 fibers.

#### Advantages:

G652D Marginally lower attenuation and lower splicing losses, when splicing like fibres. Providing longer cable networks.

G657A2 Smaller cable and cords installation radius, providing for low-cost installation, miniaturization and higher density connectivity.

Therefore, G657A2 optical fibre in patch cords, provide an improved bend radius and flexibility, which may allow for better cable management and routing in congested areas. The improved bend radius may also allow for increased density in high-density patching fields. G657A2 optical fibre is becoming very popular in the Data Center and Enterprise network deployments.

LanPro provides patch cord and pigtails made with G657A2 cores, allowing the installer to use a product more resistant to bending and smaller and tight enclosures, without significant losses.

LanPro is continuously improving its products and reserves the right to change specifications and availability without prior notice.