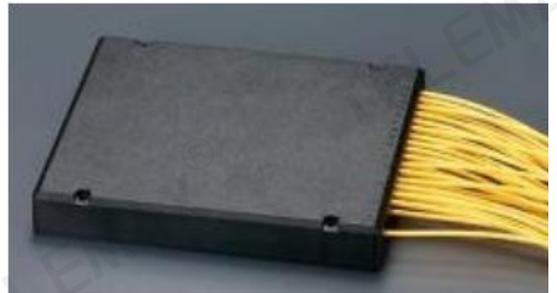
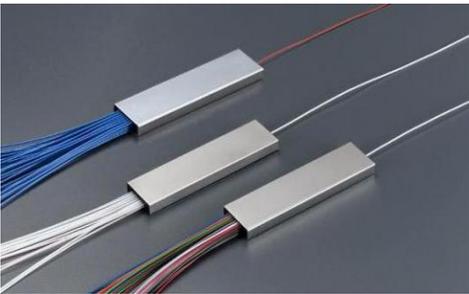


# PLC Splitter Specification



## PLC Splitters

PLC Splitter is a type of optical power management device that is fabricated using silica waveguide technology. We provides whole series of 1xN and 2xN splitter products that are tailored for specific applications.

### Features

- ◆ Low Insertion loss
- ◆ Low PDL
- ◆ Compact Design
- ◆ Good channel-to-channel uniformity
- ◆ Wide Operating Wavelength: From 1260nm to 1650nm
- ◆ Wide Operating Temperature: From -40 °C to 85°C High Reliability and Stability



### PLC Splitter Type

#### 1. Classification by shape

- ◆ Mini PLC Splitter
- ◆ Bare fiber PLC Splitter
- ◆ ABS Box PLC Splitter
- ◆ Chassis type PLC Splitter
- ◆ Rack mount type PLC Splitter

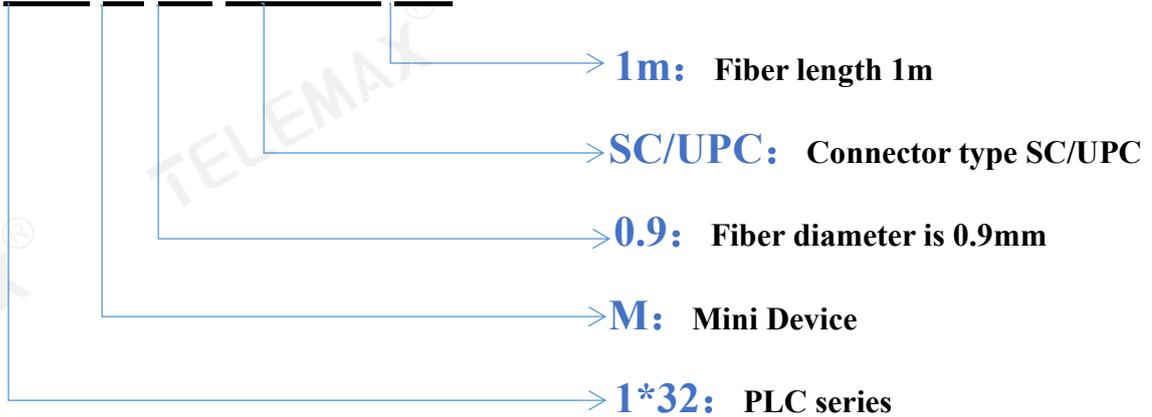


## 2. Classification by series

1/2\*2、1/2\*3、1/2\*4、1/2\*6、1/2\*8、1/2\*12、1/2\*16、1/2\*32、1/2\*64、1/2\*126

### Product Number

**PLC-1\*32-M-0.9-SC/UPC-1m**



The length of optical fiber can be customized according to the actual requirement.

Connector type: SC/APC、FC/APC、LC/APC、FC/UPC、LC/UPC、ST/UPC

Fiber diameter: 0.9mm/2.0mm/3.0mm

PLC Device: Mini/ABS Box

PLC series: 1/2\*2/3/4/6/8/12/16/32/64/128

Item	Specification
Fiber type	G657A1, G657A2
Diameter(mm)	0.25, 0.9: 0.85-0.9; 2.0: 1.85-2.05 3.0: 2.85-3.05
Material	0.9—Hytel; 2.0/3.0—PVC or LSZH
Steel tube	304
Box	ABS
Rack mount	Steel

### I.Mechanical Specification:

## 1\*N Splitters:

Parameter		Unit	Value									
Product Type			1x2	1x3	1x4	1x6	1x8	1x12	1x16	1x32	1x64	1x128
Operating Wavelength		nm	1260~1650									
Insertion Loss	Typ.	dB	3.6	6.3	7.0	9.4	10.2	12.4	13.5	16.6	20.1	24.5
	Max.	dB	4.1	6.8	7.5	10.0	10.5	13	13.8	17.1	20.8	25.3
Uniformity (Max.)		dB	0.5	0.8	0.8	0.8	0.8	1.2	1.4	1.5	2.0	2.6
PDL(Max.)		dB	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.8
Return Loss		dB	≥55(APC type connectors) / 50(UPC type connectors)									
Directivity		dB	≥55									
Operating & Storage Temperature		°C	-40~+85									

## 2\*N Splitters:

Parameter		Unit	Value									
Product Type			2x2	2x3	2x4	2x6	2x8	2x12	2x16	2x32	2x64	2x128
Operating Wavelength		nm	1260~1650									
Insertion Loss	Typ.	dB	4.1	6.6	7.2	9.7	10.5	12.6	13.8	17	20.5	24.8
	Max.	dB	4.5	7.0	7.6	10.2	11	13.2	14.5	17.8	21.5	25.8
Uniformity (Max.)		dB	0.8	0.8	0.8	1.0	1.0	1.5	1.5	1.8	2.5	3.0
PDL(Max.)		dB	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.6	1.0
Return Loss		dB	≥55(APC type connectors) / 50(UPC type connectors)									
Directivity		dB	≥55									
Operating & Storage Temperature		°C	-40~+85									

## II. PLC Splitters Material Requirements

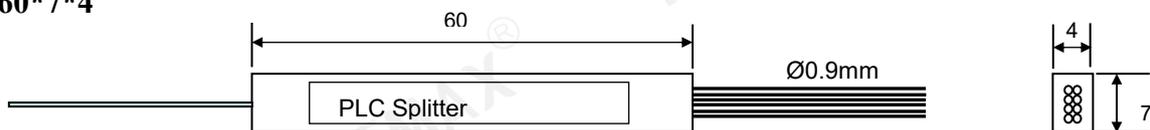
## 1. Optical Fiber

Project	Specifications
Optical Fiber	G657A
Φ(mm)	0.25/0.9/2.0/3.0
Optical Cable	White/Hytrel      Yellow/PVC/Aramid fiber

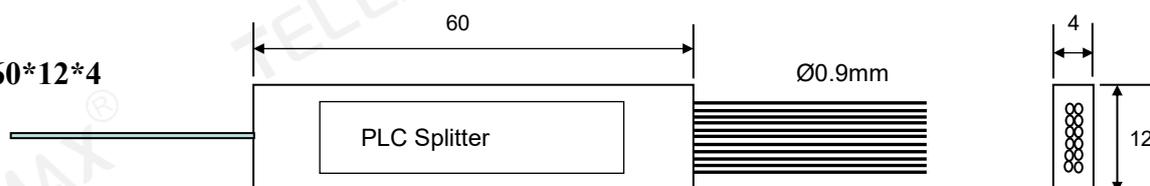
## 2. Mini Device component packing dimension: (unit: mm)

Product Type	Unit	Length	Width	Height
1x2	mm	50	7	4
1x4	mm	50	7	4
1x8	mm	60	7	4
1x16	mm	60	12	4
1x32	mm	80	20	6
1x64	mm	100	40	6
2x2	mm	60	7	4
2x4	mm	60	7	4
2x8	mm	60	7	4
2x16	mm	60	12	4
2x32	mm	80	20	6
2x64	mm	100	40	6

60\*7\*4

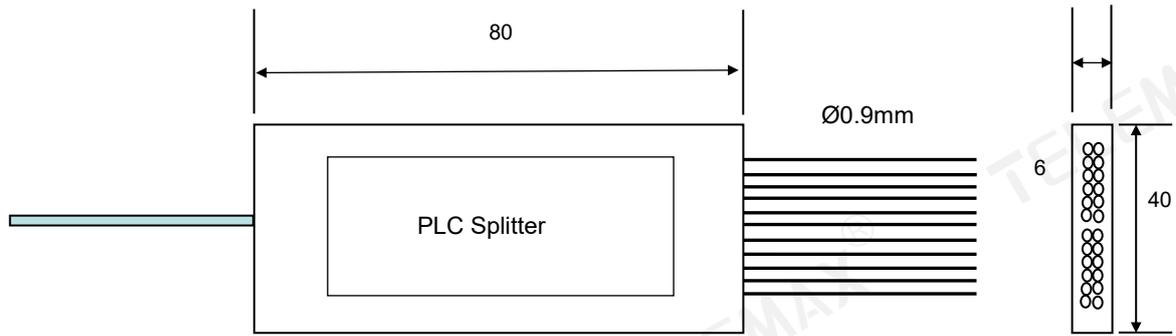


60\*12\*4



80\*20\*6

6



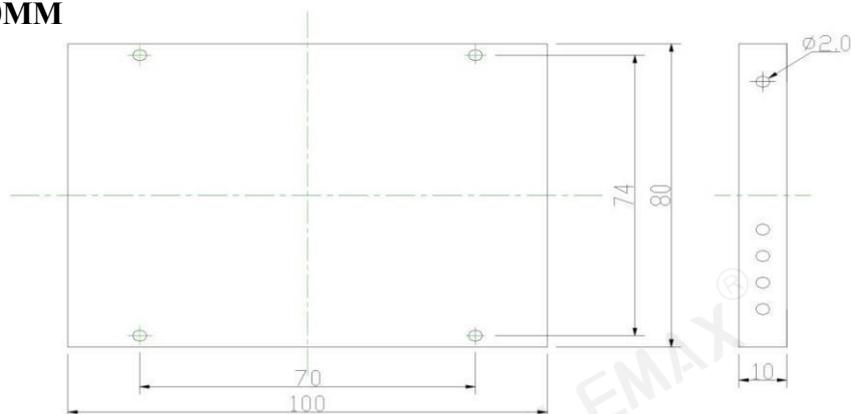
### 3. Bare type packing dimension: (unit: mm)

Product Type	Unit	Length	Width	Height
1x2	mm	40	4	4
1x4	mm	40	4	4
1x8	mm	40	4	4
1x16	mm	60	7	4
1x32	mm	60	7	4
1x64	mm	60	12	4
2x2	mm	40	4	4
2x4	mm	40	4	4
2x8	mm	40	4	4
2x16	mm	60	7	4
2x32	mm	60	7	4
2x64	mm	60	12	4

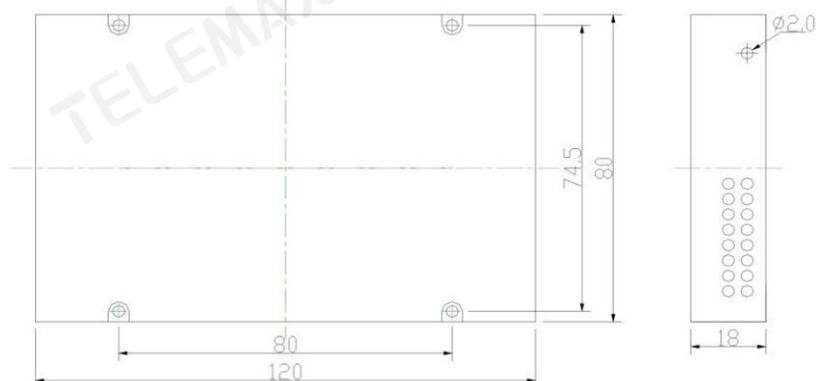
### 4. ABS packing dimension: (unit: mm)

Product Type	mm	Diameter	LxWxH
1/2x2	mm	2.0/3.0	100x80x10
1/2x4	mm	2.0/3.0	100x80x10
1/2x8	mm	2.0/3.0	100x80x10
1/2x16	mm	2.0/3.0	120x80x18
1/2x32	mm	2.0/3.0	120x80x18
1/2x64	mm	2.0/3.0	120x80x18, 140x114x18
1/2x128	mm	2.0/3.0	140x114x18

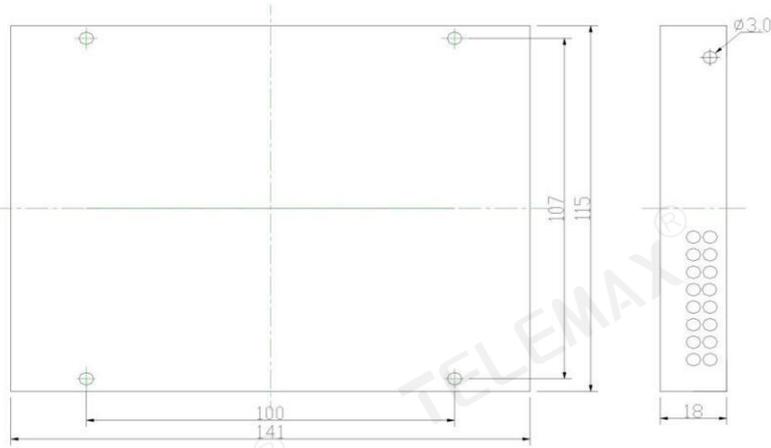
**100x80x10MM**



**120x80x18MM**

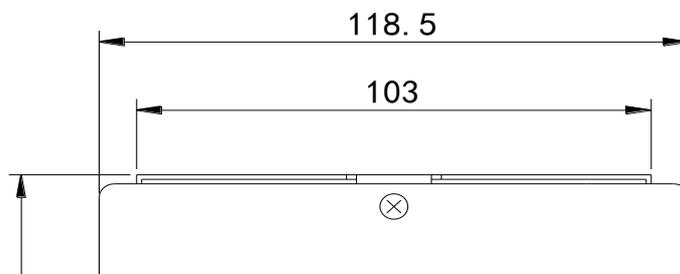


140x114x18MM

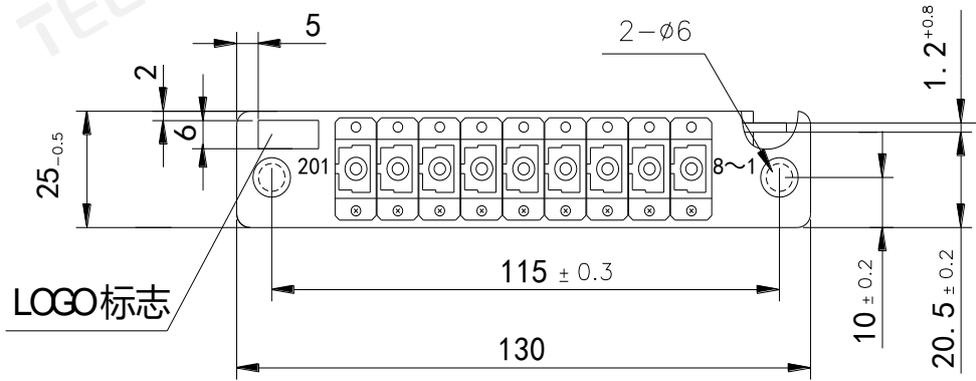


### 5. Chassis type packing dimension: (unit: mm)

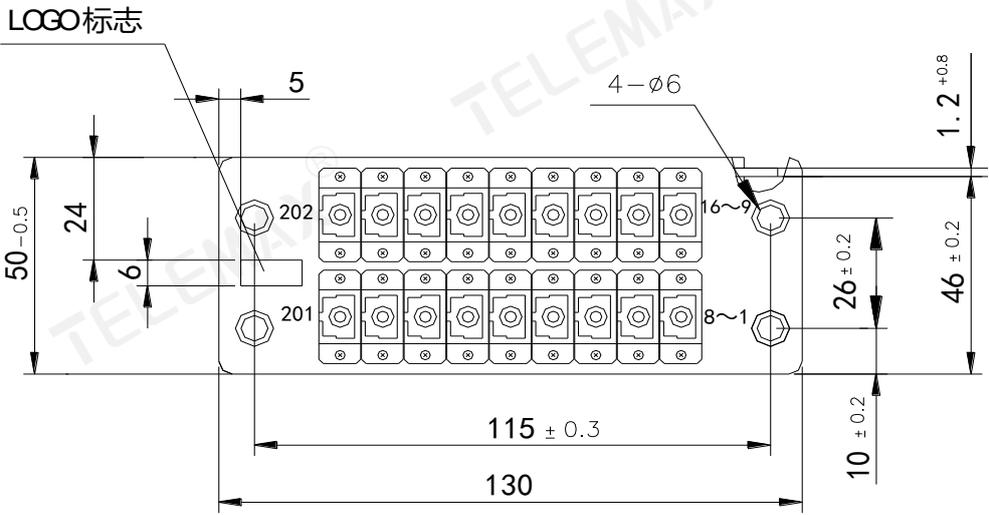
Product type	Connector type	单位	LxWxH
1x2	SC	mm	130*100*25
1x4	SC	mm	130*100*25
1x8	SC	mm	130*100*25
1x8	LC	mm	130*100*25
1*16	SC	mm	130*100*50
1*16	LC	mm	130*100*25
1x32	SC	mm	130*100*102, 66*100*50
1x32	LC	mm	130*100*50
1x64	SC	mm	130*100*206
1x64	LC	mm	130*100*102



130\*80\*25

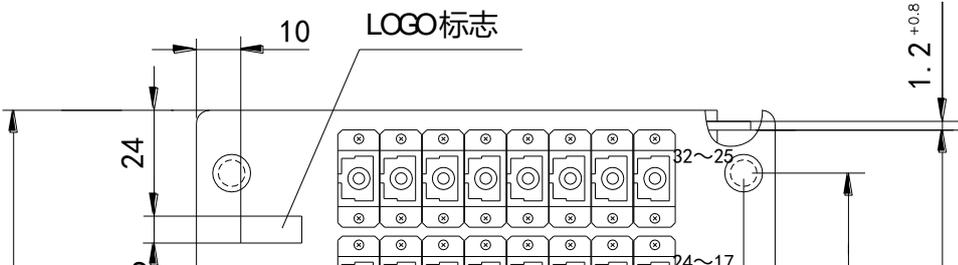


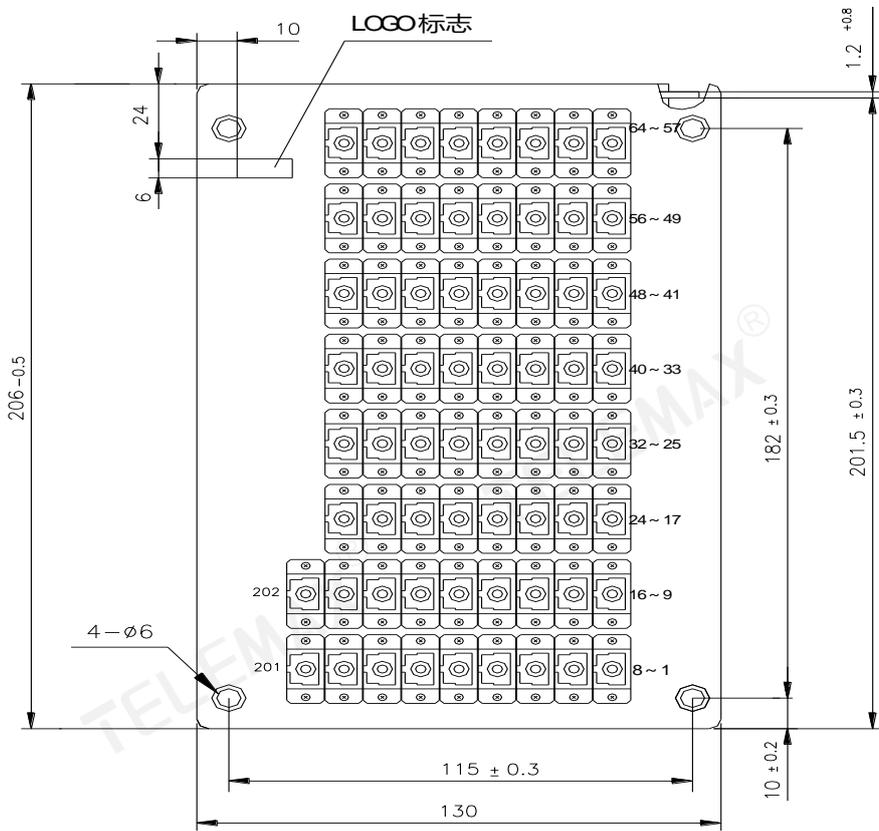
130\*100\*50



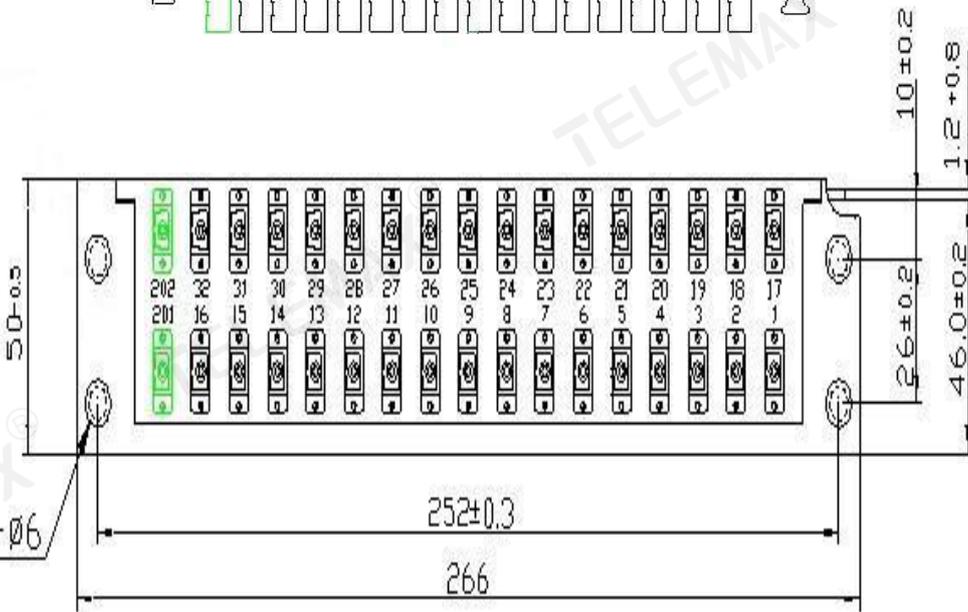
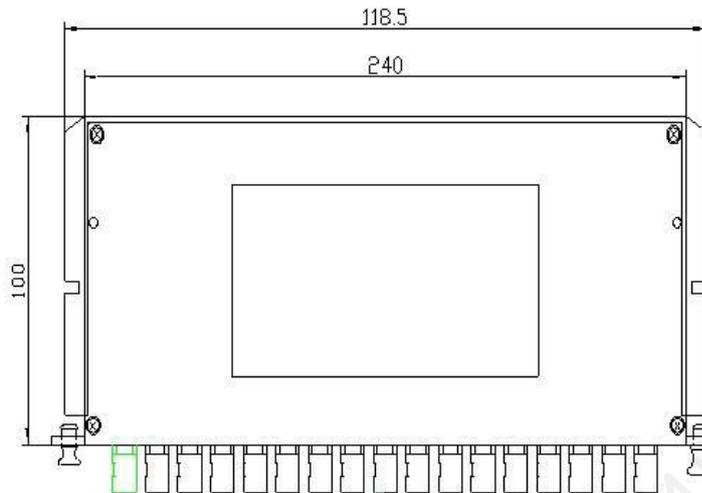
130\*100\*102

130\*100\*206





266\*100\*50: 1/2\*32

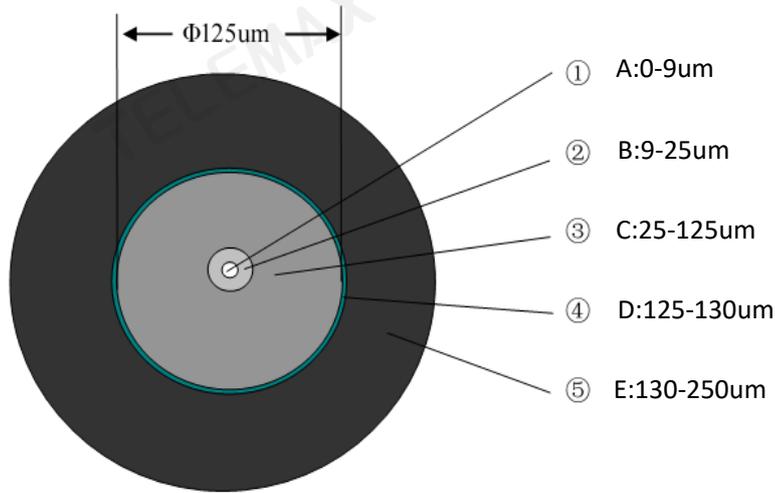


III.Co



MIN

## Face Specification



Scope	Defect description	Standard
□A:	Scratches And Nicks	No
	Bubbles And Spots	No
	Foreign Body	No
□B:	Scratches And Nicks	No
	Bubbles And Spots	No
	Foreign Body	No
□C:	Scratches And Nicks	≤2um and ≤1pcs
	Bubbles And Spots	≤2um and ≤3pcs
	Foreign Body	No
□D:	Scratches And Nicks	≤5um and ≤1pcs
	Bubbles And Spots	≤5um and ≤2pcs
	Foreign Body	No
□E:	Scratches And Nicks	≤5um and ≤3pcs
	Bubbles And Spots	≤5um and ≤3pcs

	<b>Foreign Body</b>	<b>Allow slightly non removable</b>
--	---------------------	-------------------------------------

## Technical specifications

□ Insertion Loss: IEC 61300-3-4

□ Return Loss: IEC61300-3-6

□ End Face Geometry:

UPC Radius of curvature: 10 ~ 25mm

APC Radius of curvature: 5 ~ 18mm

Apex offset : 0 ~ 60um

Optical fiber depression: +50 ~ -100

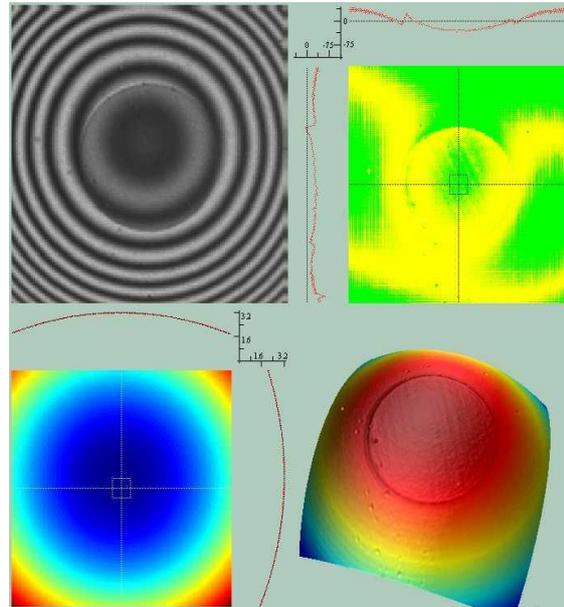
APC Angle:  $8 \pm 0.5^\circ$

□ Mechanical properties :

Durability: 500 times < 0.2dB

□ 3D APC  $\geq 70\%$

UPC  $\geq 80\%$



## IV. Packing

### 1. Steel tube

**The label:**





Label printing content can be according to customer requirements

Laser lettering on steel tube:



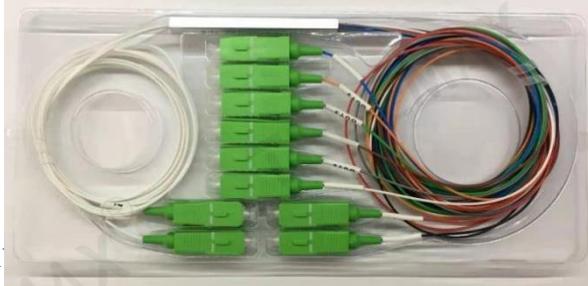
Steel tube laser lettering content can be according to customer requirements

3. Bare type PLC Splitter:

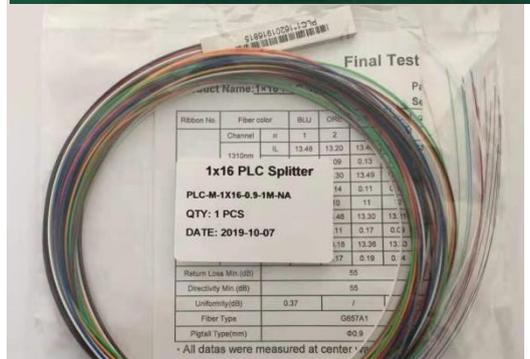


4. Mini type

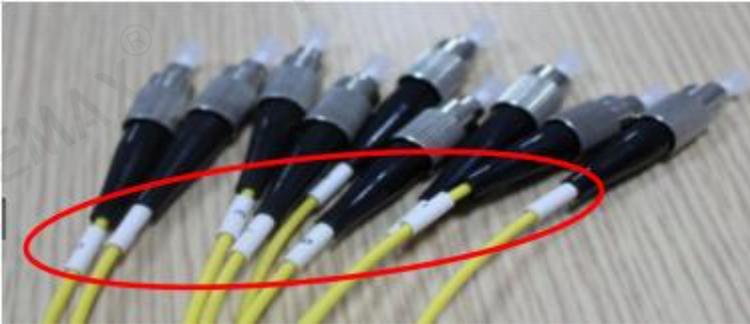
1\*2/1\*3/1\*4/1\*6/1\*8、2\*2/2\*3/2\*4/2\*6/2\*8:



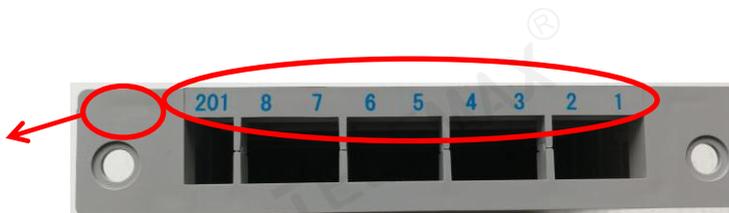
Wi



#### 4. ABS box PLC splitter



#### 5. Chassis TYPE



#### 6. Estimate packing details

With connector in blister box

DESCRIPTION	QTY(pcs)	SIZE(mm)	N.W(kg)	G. W(kg)
-------------	----------	----------	---------	----------

1*2/2*2/1*3/2*3/1*4/2*4	200	630*310*300	7.00	9.50
1*6/2*6/1*8/2*8	200	630*310*300	9.70	12.00
1*12/2*12/1*16/2*16	125	520*470*320	11.90	13.80
1*32/2*32	75	520*470*320	11.00	13.00

### Bare type /Without connector in blister box (2 pcs in one box)

DESCRIPTION	QTY(pcs)	SIZE(mm)	N.W(kg)	G.W(kg)
1*2/2*2/1*3/2*3/1*4/2*4	400	630*310*300	7.00	9.00
1*6/2*6/1*8/2*8	400	630*310*300	7.80	9.80
1*12/2*12/1*16/2*16	400	630*310*300	12.00	14.00

### ABS type

DESCRIPTION	QTY(pcs)	SIZE(mm)	N.W(kg)	G.W(kg)
1*2/2*2/1*3/2*3/1*4/2*4	100	520*470*320	7.00	9.00
1*6/2*6/1*8/2*8	100	520*470*320	7.80	9.80
1*12/2*12/1*16/2*16	40	520*470*320	12.00	14.00

### Chassis type

DESCRIPTION	QTY(pcs)	SIZE(mm)	N.W(kg)	G.W(kg)
1*2/2*2/1*3/2*3/1*4/2*4	100	630*310*300	9.30	12.00
1*6/2*6/1*8/2*8	100	630*310*300	11.10	13.80
1*12/2*12/1*16/2*16	50	630*310*300	9.3	12.00