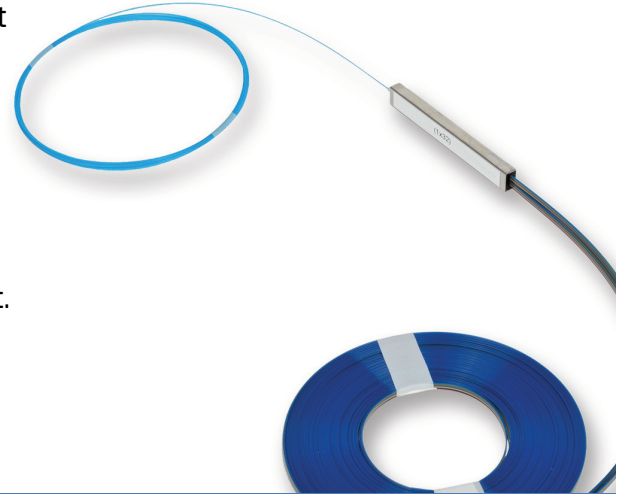


## Fiber PLC Splitter

### Overview

Fibre optic splitter is a network component that distributes incoming light (one or two input fibers) in equal parts towards multiple output fibers (2-64). Splitters are available with 250  $\mu\text{m}$  bare fibers, 900 $\mu\text{m}$  buffered fibers and 2.0 mm cords. Input and output cords and fibers can have various lengths and can be terminated by optical connectors. KINGTON fibre optic splitters can be integrated inside several products and/or applications in combination with keel fibre or cable management systems.

All products meet Telcordia 1209 and 1221 reliability requirements and are certified by TLC for network deployment.



### Features

- Wide Operating wavelength From 1260-1650nm  $\pm$ 40nm
- Low excess loss & High performance
- Good uniformity & Low PDL
- Small package size
- Various connector type & Package Size available
- Standard connector type SC/APC-80, SC/UPC
- Must have a cover to prevent dirt
- Specifications for connectors
- Insertion loss:  $\leq$  0.30dB
- Reflection loss: 60dB for SC/APC-80 , 50dB for SC/UPC
- Loss stability:  $\leq$  0.1dB after 500 connection cycles
- Working temperature: from -100C to +650C
- Humidity  $\leq$ 95%RH
- Mechanical, environmental and connection requirements according to ITU-T L.36/2008
- Vibration resistance - Vibration (IEC 61300-2-1): compliant with ITU-T L.36/2008 (clause 9.2.1)
- Strength of the coupling mechanism (IEC 61300-2-6): comply with ITU-T L.36/2008 (section 9.2.2)
- Fiber/cable retention (IEC 61300-2-4): compliant with ITU-T L.36/2008 (section 9.2.3.1)
- Change of temperature (IEC 61300-2-22): comply with ITU-T L.36/2008 (clause 9.2.6.4)
- Environmental tests (according to ITU-T L51/2012 Passive node elements for fiber optic networks - General principles and definitions for characterization and performance evaluation, Table A.1/L.51 - Summary of typical parameters for the basic environmental classes and ITU-T L.52/2003 Deployment of Passive Optical Networks (PON), Table I.3/L.52 - Environmental and mechanical performance)
- Vibration resistance test according to IEC 61300-2-1
- Test for resistance to temperature changes (Temperature cycling) according to IEC 61300-2-22, temperature range from -10oC to +65oC
- Immersion in water (water immersion): temperature 35°C  $\div$  43°C; pH 5.5 for 5 days. Loss change  $<$ 0.2dB
- Salt spray: spray 5% NaCl water, then maintain the temperature at 43oC  $\div$  65oC for 5 days. Loss change  $<$ 0.2dB
- Working environment and conditions: non-wavelength selective branching optocoupler - working in normal environment according to IEC 61753/ITU-T G.671 (non-wavelength selective branching devices for Category U - Uncontrolled environment) (or equivalent)

## Fiber PLC Splitter

## Specifications

## 1×N PLC Splitter

Parameters	1x2 Port	1x4 Port	1x8 Port	1x16 Port	1x32 Port	1x64 Port
Operating Wavelength(nm)	1260 ~ 1650 ±40nm					
Fiber Type	G652D/G657A1/G657A2					
Insertion Loss(dB)	3.8	7.1	10.2	13.5	16.8	20.5
Uniformity(dB)	0.4	0.6	0.8	1.2	1.5	2
Return Loss(dB)	55	55	55	55	55	55
PDL(dB)	0.2	0.2	0.2	0.3	0.3	0.35
Directivity (dB)	55	55	55	55	55	55
Temperature Stability(-40 ~ 85℃)(dB)	0.5	0.5	0.5	0.5	0.5	0.5
Operating Temperature (℃)	-25 ~ 70					
Storage Temperature (℃)	-25 ~ 70					
Mini Module Dimension (LxWxH)	60x7x4	60x7x4	60x7x4	60x12x4	80x20x6	100x40x6
ABS Box Dimension (LxWxH)	100x80x10	100x80x10	100x80x10	120x80x18	120x80x18	140x115x18
Bare Fiber Dimension (LxWxH)	40x4x4	40x4x4	40x4x4	50x7x4	50x7x4	60x12x4

## Specifications

## 2×N PLC Splitter

Parameters	2x2 Port	2x4 Port	2x8 Port	2x16 Port	2x32 Port	2x64 Port
Operating Wavelength(nm)	1260 ~ 1650 ±40nm					
Fiber Type	G652D/G657A1/G657A2					
Insertion Loss(dB)	4.1	7.4	10.8	14.3	17.3	21
Uniformity(dB)	1	1.5	1.5	2	2	2.5
Return Loss(dB)	55	55	55	55	55	55
PDL(dB)	0.3	0.3	0.3	0.3	0.3	0.5
Directivity (dB)	55	55	55	55	55	55
Temperature Stability(-40 ~ 85℃)(dB)	0.5	0.5	0.5	0.5	0.5	0.5
Operating Temperature (℃)	-25 ~ 70					
Storage Temperature (℃)	-25 ~ 70					
Mini Module Dimension (LxWxH)	60x7x4	60x7x4	60x7x4	60x12x4	80x20x6	100x40x6
ABS Box Dimension (LxWxH)	100x80x10	100x80x10	100x80x10	120x80x18	120x80x18	140x115x18
Bare Fiber Dimension (LxWxH)	40x4x4	40x4x4	40x4x4	50x7x4	50x7x4	60x12x4

Note: Add an additional 0.3dB loss per connector.

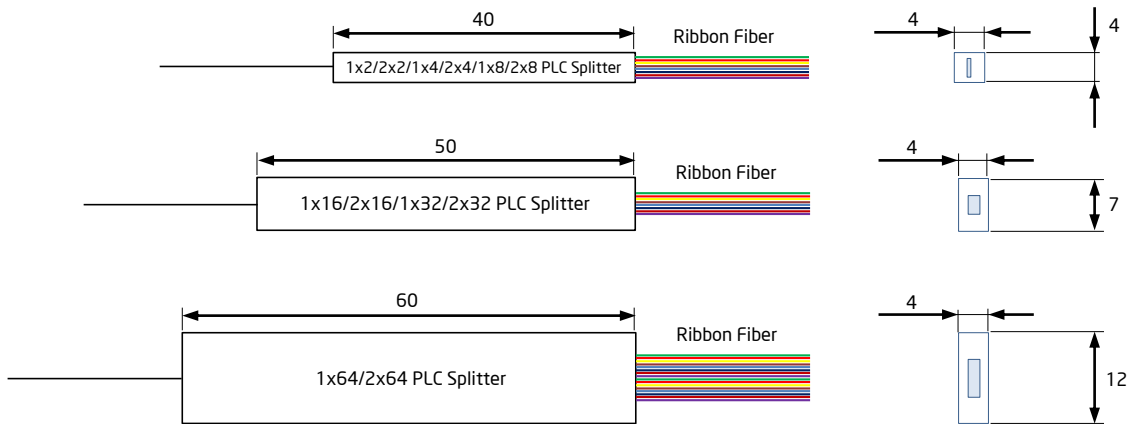
## Applications

- Telecommunications networks
- CATV system
- Optical equipment
- Fiber optic sensors
- FTTH and FTTx

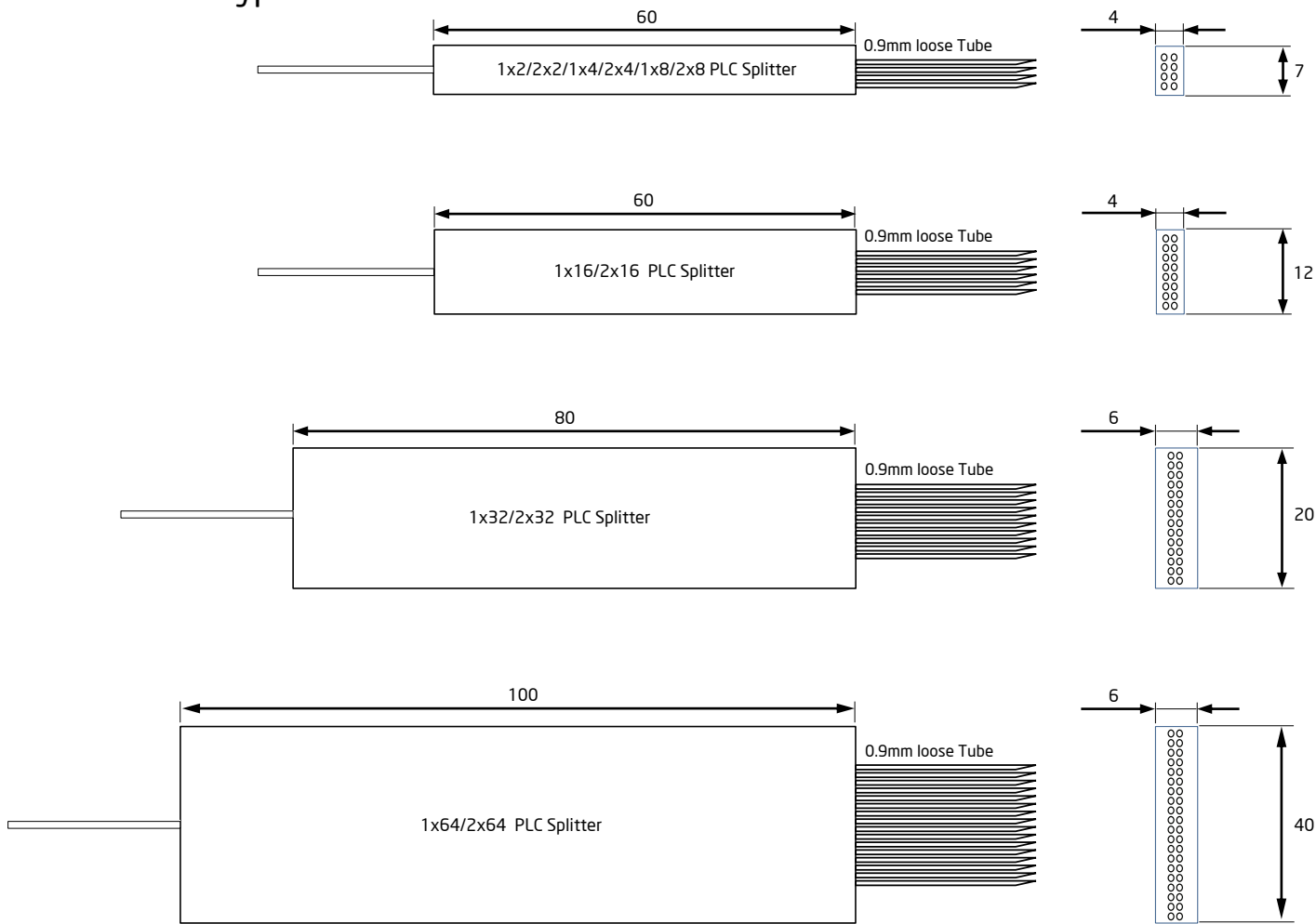
Fiber PLC Splitter

Product Diagram

Bare Fiber Type



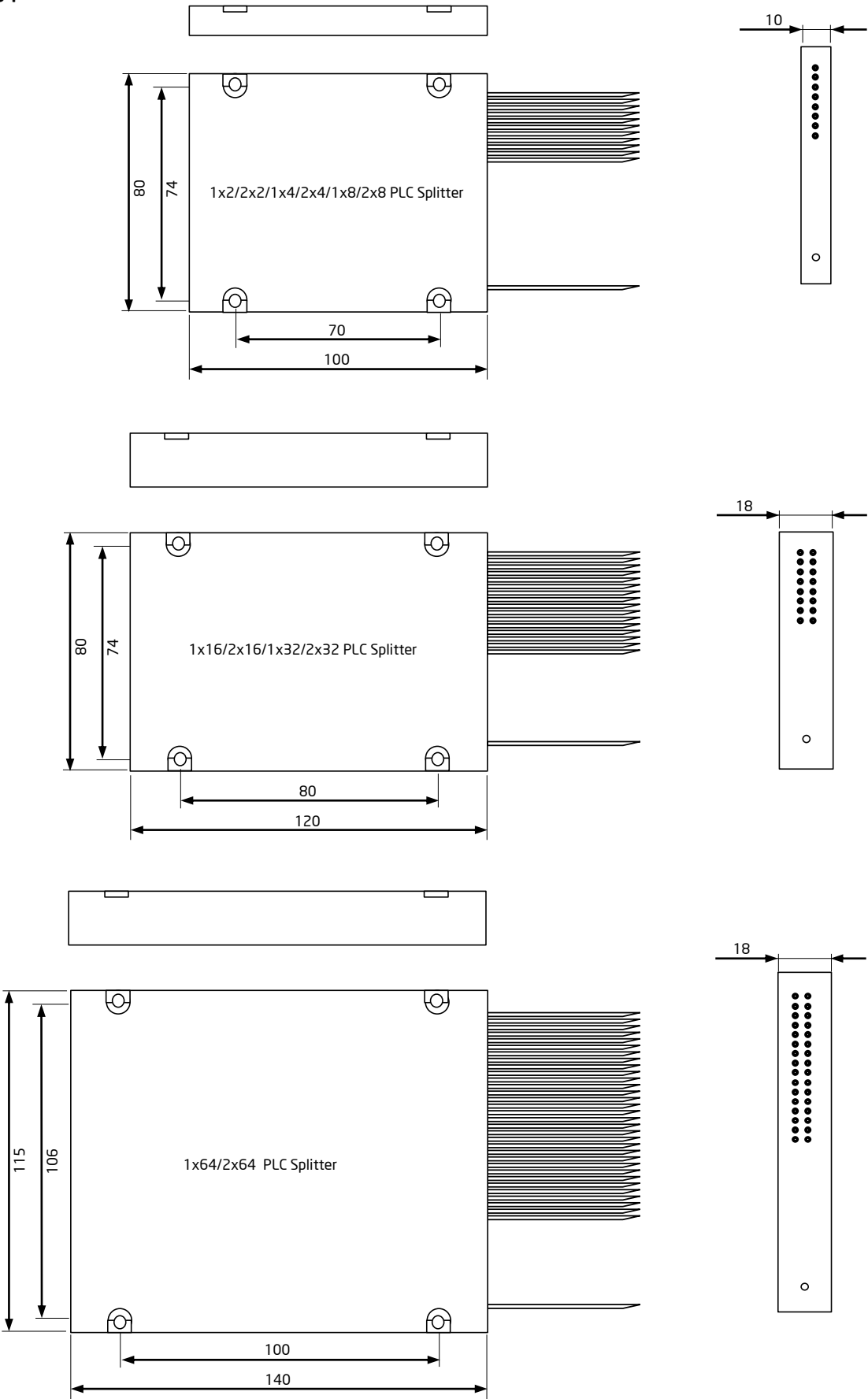
Mini Module Type



Fiber PLC Splitter

Product Diagram

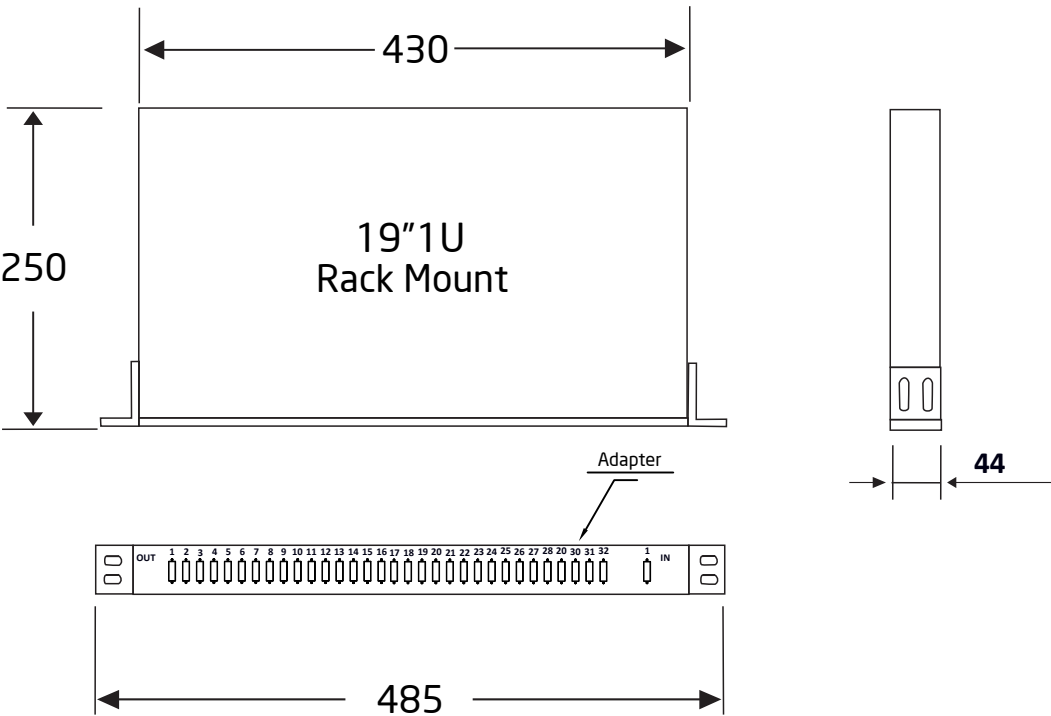
ABS Box Type



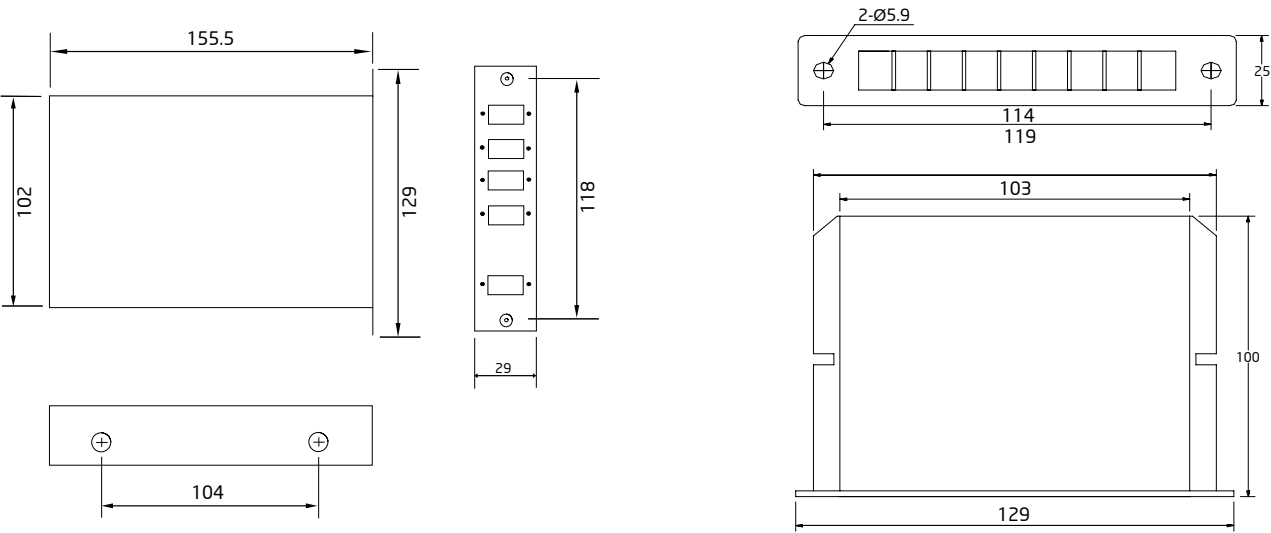


Product Diagram

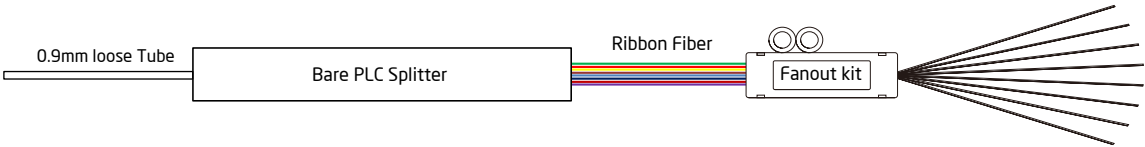
19"1U Rack



LGX Box Type



Fan-Out Type



## Fiber PLC Splitter

## Ordering Information

1	2	-	3	-	4	-	5	-	6	-	7	-	8	-	9	-	10	
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1	Product model
PLS	PLC splitter

2	Port type
102	1x2
104	1x4
108	1x8
116	1x16
132	1x32
164	1x64
202	2x2
204	2x4
208	2x8
216	2x16
232	2x32
264	2x64

3	Package type
A	40x4x4
B	50x7x4
C	60x7x4
D	60x12x4
E	80x20x6
F	100x40x6
G	100x80x10
H	120x80x18
I	140x115x18
J	19"1U Rack
S	Special

4	Fiber type
D0	G.652.D
A1	G.657.A1
A2	G.657.A2

5	Input tube diameter
9T	0.9mm tight tube
9L	0.9mm loose tube
C2	2.0 mm cable
B3	3.0 mm cable
2F	250um fiber
RF	Ribbon fiber

6	Input fiber length
05	0.5m
10	1.0m
15	1.5m
20	2.0m
30	3.0m

7	Input connector
SU	SC/UPC
SA	SC/APC
SAT	SC/APC step ferrule
LU	LC/UPC
LA	LC/APC
FU	FC/UPC
FA	FC/APC
FAT	FC/APC step ferrule
00	No Connector

8	Output tube diameter
9T	0.9mm tight tube
9L	0.9mm loose tube
C2	2.0 mm cable
B3	3.0 mm cable
2F	250um fiber
RF	Ribbon fiber

9	Output fiber length
05	0.5m
10	1.0m
15	1.5m
20	2.0m
30	3.0m

10	Output connector
SU	SC/UPC
SA	SC/APC
SAT	SC/APC step ferrule
LU	LC/UPC
LA	LC/APC
FU	FC/UPC
FA	FC/APC
FAT	FC/APC step ferrule
00	No Connector

Note

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