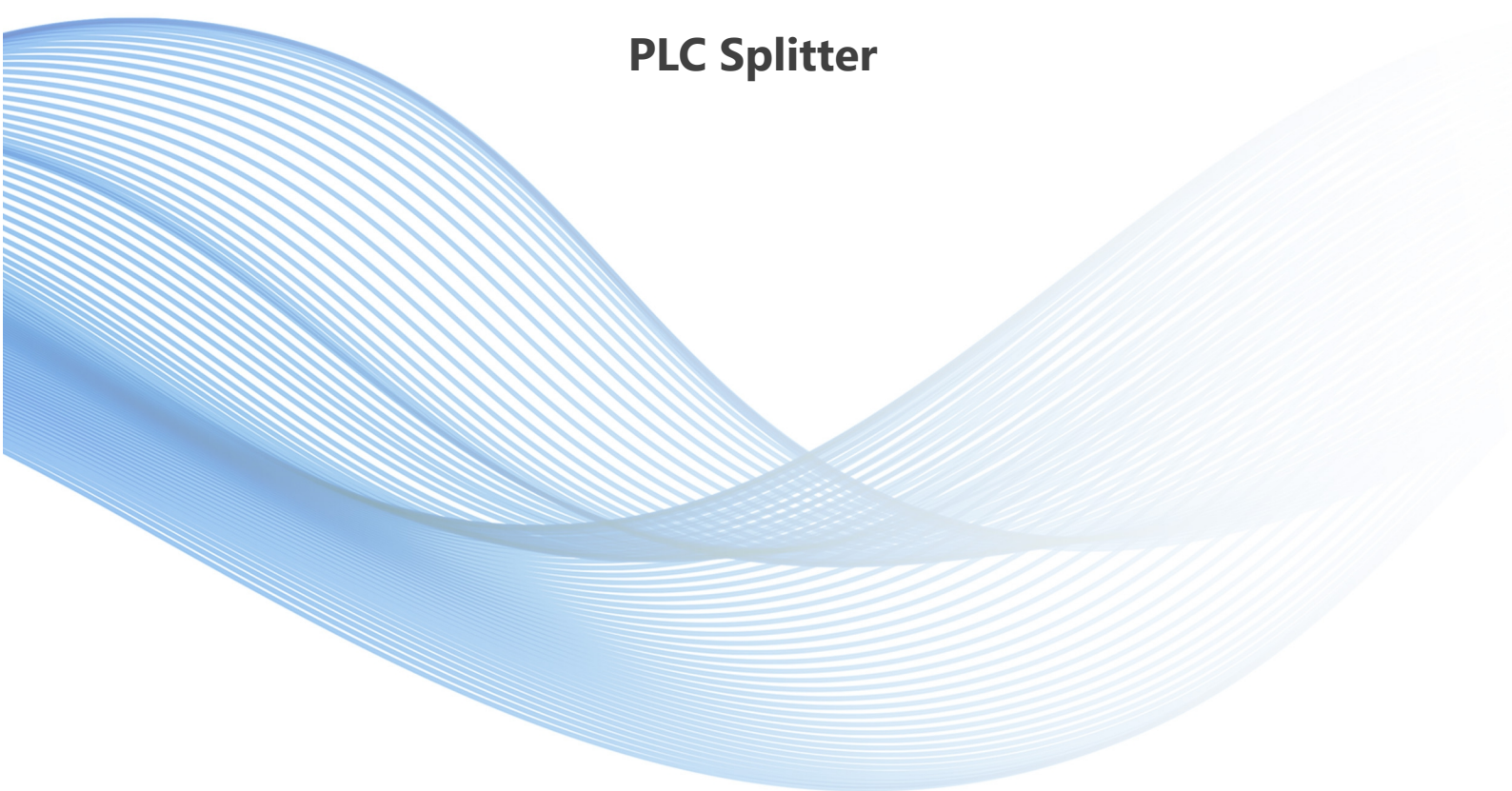


Spec No.: ZTT 23-XJ24243



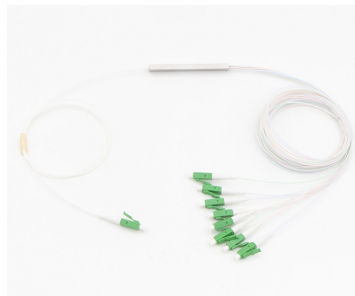
TECHNICAL SPECIFICATION

PLC Splitter



1. 19" Rack Type Optical PLC Splitter GPX-OPA, 1U, with 16x1:2 mini type splitter inside(LC/APC adapters, pigtail at input and output ports, $0.9 \pm 0.08\text{mm}$, length 0.8m, G657A1 fiber, Hytel)
- 19" Rack Type Optical PLC Splitter GPX-OPA, 1U, with 8x1:4 mini type splitter inside(LC/APC adapters, pigtail at input and output ports, $0.9 \pm 0.08\text{mm}$, length 0.8m, G657A1 fiber, Hytel)
- 19" Rack Type Optical PLC Splitter GPX-OPA, 1U, with 2x1:32 mini type splitter inside(duplex LC/APC adapter, pigtail at input and output ports, $0.9 \pm 0.08\text{mm}$, length 0.8m, G657A1 fiber, Hytel)
- 19" Rack Type Optical PLC Splitter GPX-OPA, 1U,with 1x1:64 mini type splitter inside(duplex LC/APC adapter, pigtail at input and output ports, $0.9 \pm 0.08\text{mm}$, length 0.8m, G657A1 fiber, Hytel)
- 19" Rack Type Optical PLC Splitter GPX-OPA, 1U,with 1x1:32 mini type splitter inside(duplex LC/APC adapter, pigtail at input and output ports, $0.9 \pm 0.08\text{mm}$, length 0.8m, G657A1 fiber, Hytel)

1.1 General properties:



1.2 Application

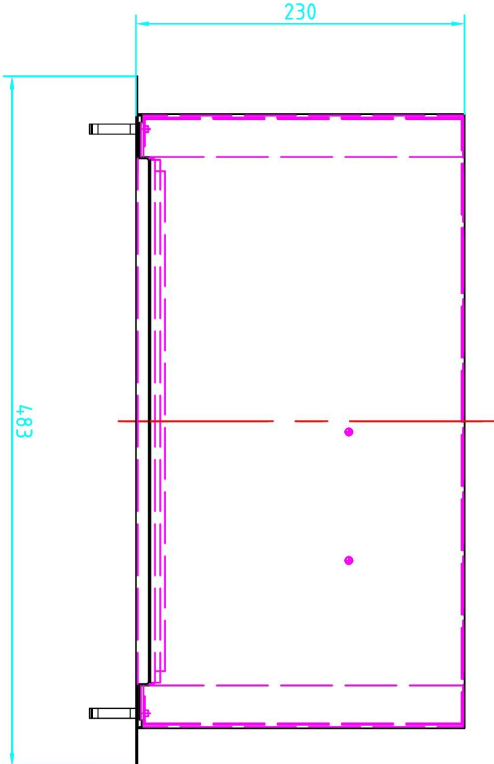
- The body made of cold rolled steel.
- Powder coating Color: light gray (RAL7035).
- Kit for adapting with 19" & 21" rack.
- Add the patch cord organizer in front of the panel, two pieces on both sides.
- The connectors numbered consecutively.
- The input connector and the output connectors clearly marked.


1.3 Features

- Small size and aesthetic appearance.
- Installation quick, reliable performance, stability.
- Employ integrated optic production process.
- Wide operating wavelength range.
- Good uniformity, in particular the application of PON.
- Product measure: 483mm (W) X230mm (D) X44mm (H).

Note: The nominal size may vary by $\pm 10\text{mm}$.


CAD Drawing (Splitting ratio 16x1:2 LC/APC)





Technical requirement:

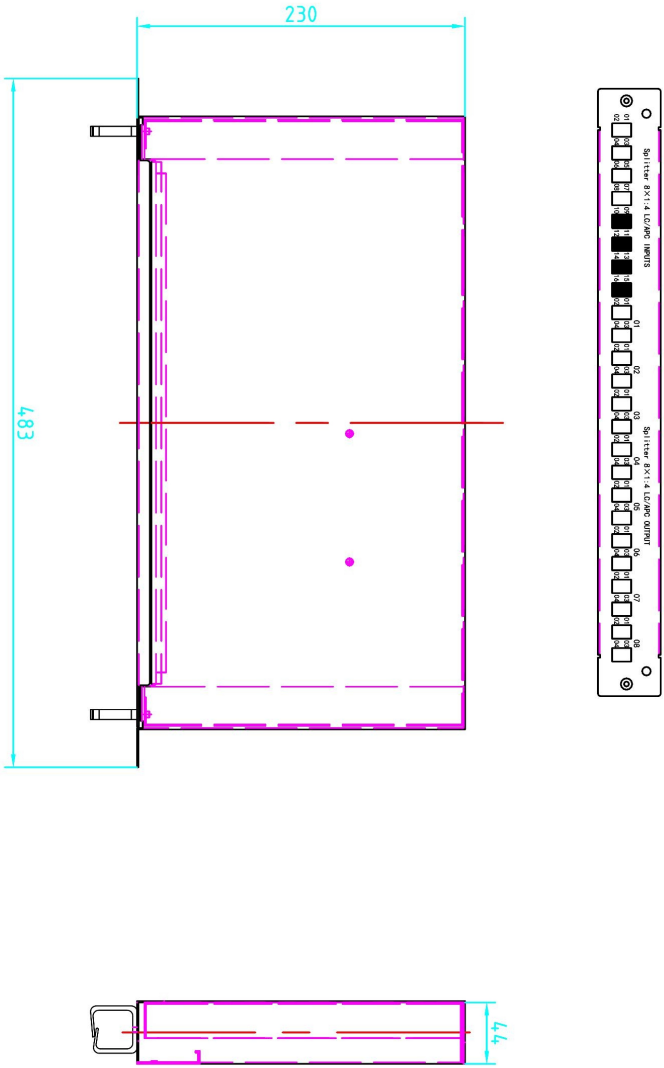
1. All sharp edges are blunted;
2. When assembled, to make sure the surface smooth, no scratch and spray defect;
3. All dimensions are in $\pm 10\text{mm}$.


Product Name		Delilink opt. 1HU razeop (Splitting 16x1:2 LC/APC)		 中天科技	
Drawing	Bryan	2023.03.21			
Checked	Z.Y.Y	2023.03.21			
Approved	W.J.B	2023.03.21			
Jiangsu Zhongtian Technology Co., Ltd.		Mass		Scale	NTS
		JSF-9997	REV	A	

CAD Drawing (Splitting ratio 8x1:4 LC/APC)

Technical requirement:

1. All sharp edges are blunted;
2. When assembled, to make sure the surface smooth,
3. All dimensions are in $\pm 10\text{mm}$.

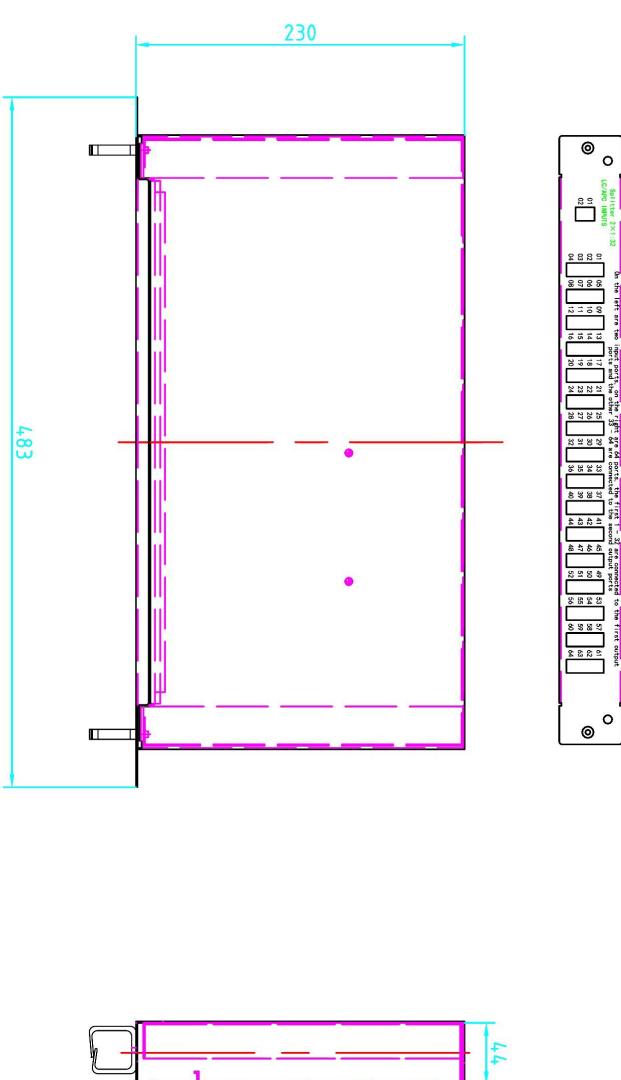



Product Name		Detailnik opt. 1HU razcep (Splitting 8x1:4 LC/APC)		 中天科技	
Drawing	Byan	2023.03.21	Jiangsu Zhongtian Technology Co., Ltd.	Mass	
Checked	Z.Y.Y	2023.03.21		Scale	NTS
Approved	W.J.B	2023.03.21		JSF-9997	REV A

CAD Drawing (Splitting ratio 2x1:32 LC/APC)

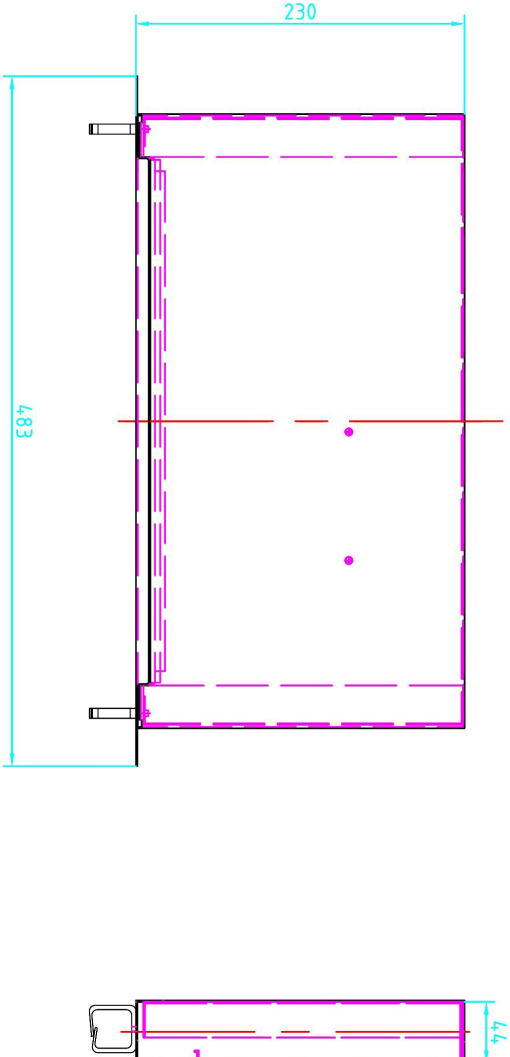
Technical requirement:

1. All sharp edges are blunted;
2. When assembled, to make sure the surface smooth, no scratch and spray defect;
3. All dimensions are in $\pm 10\text{mm}$.



Product Name		Dellink opt. 1HU ra2cep (Splitting 2x1:32 LC/APC)		 中天科技
Drawing	Bryan	2023.03.21	Mass	
Checked	Z.Y.Y	2023.03.21	Scale	
Approved	W.J.B	2023.03.21	REV	
Jiangsu Zhongtian Technology Co., Ltd.				NTS
				A

CAD Drawing (Splitting ratio 1x1:64 LC/APC)




Splitting ratio: 1x1:64

On the left is the input ports and on the right are the output ports

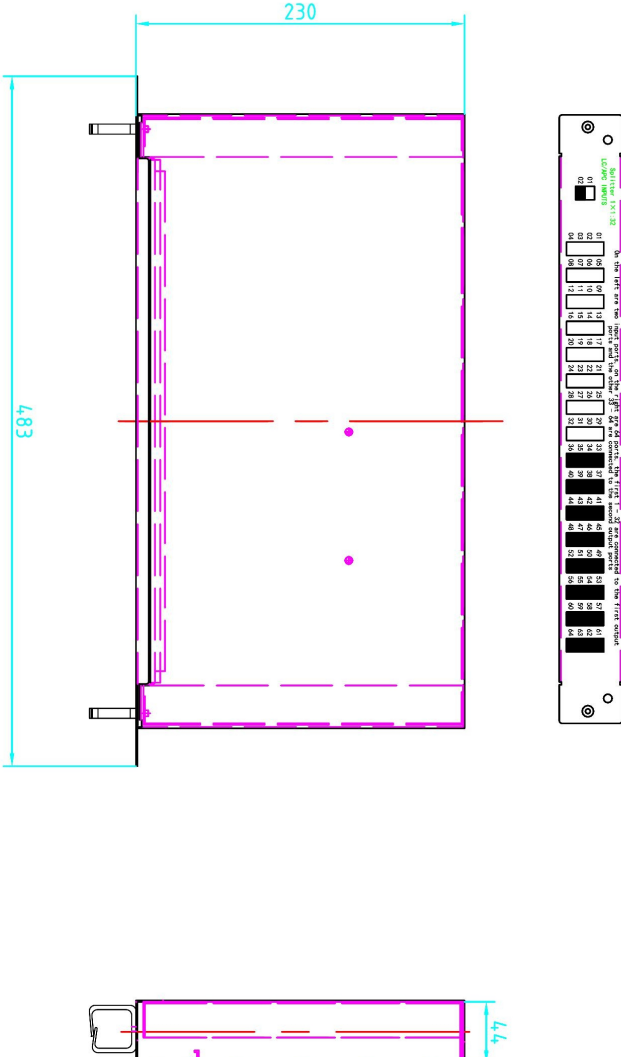
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
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Technical requirement:

1. All sharp edges are blunted;
2. When assembled, to make sure the surface smooth, no scratch and spray defect;
3. All dimensions are in $\pm 10\text{mm}$.


Product Name		Delinik opt. 14U razorp (Splitting 1x1:64 LC/APC)		 中天科技
Drawing	Bryan	2023.03.21		
Checked	Z.Y.Y	2023.03.21		
Approved	W.J.B	2023.03.21		
Mass				ZTT 中天科技
JSF-9997				
Scale	REV	NTS A		

CAD Drawing (Splitting ratio 1x1:32 LC/APC)

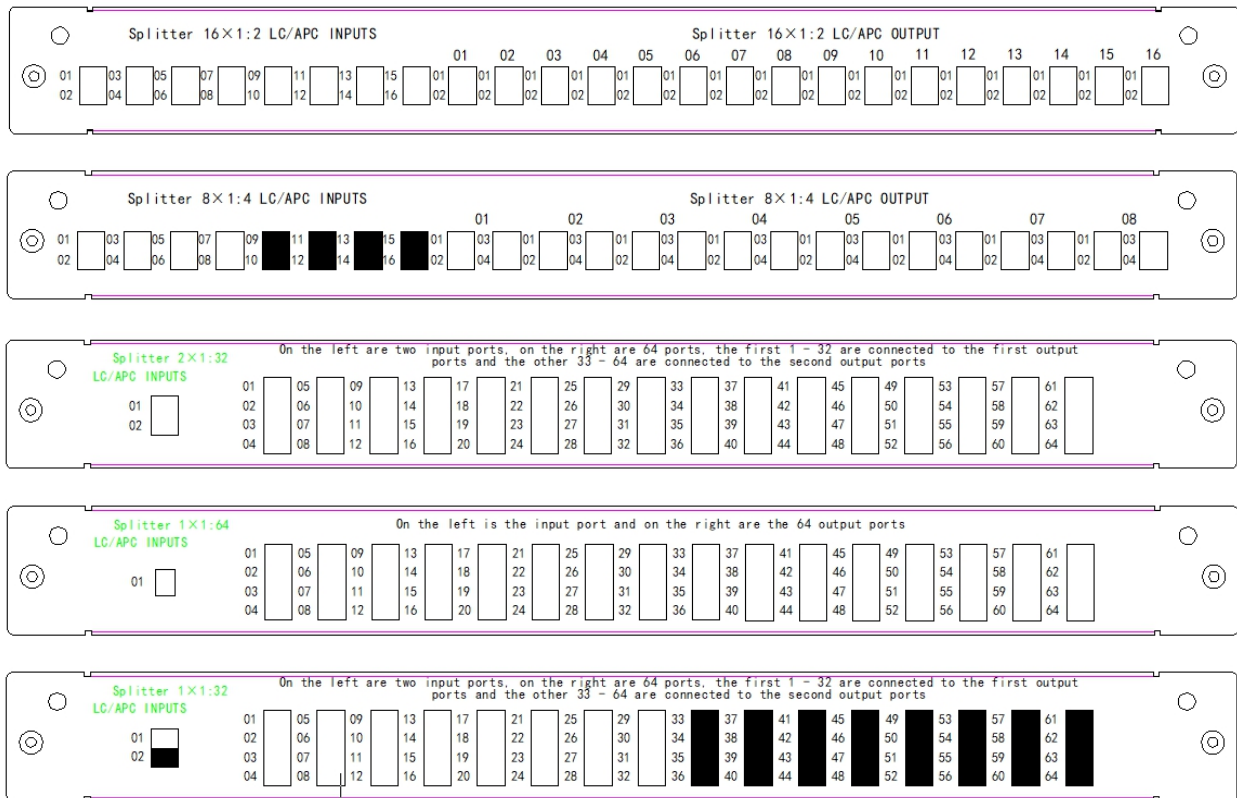


Technical requirement:

1. All sharp edges are blunted;
2. When assembled, to make sure the surface smooth,
3. All dimensions are in $\pm 10\text{mm}$.

Product Name		Delinik opt. 14U razeop (Splitting 1x1:32 LC/APC)		 中天科技
Drawing	Bryan	2023.03.21	Jiangsu Zhongtian Technology Co., Ltd.	
Checked	Z.Y.Y	2023.03.21		
Approved	W.J.B	2023.03.21		Mass JSF-9997 Scale NTS REV A

1.4 Adapter Panel layout



1.5 Technical characteristics for splitter:

Type	1X2	1X4	1X8	1X16	1X32	1X64
Channel wavelength(nm)	1260-1650					
Insertion loss(dB)	≤4.0	≤7.3	≤11.0	≤13.9	≤17.0	≤20.3
Loss Uniformity (dB)	≤0.6	≤0.6	≤1.0	≤1.4	≤1.5	≤1.8
Return loss (dB)	≥55					
Polarization dependent loss(dB)	≤0.3	≤0.3	≤0.3	≤0.3	≤0.3	≤0.3
Directivity(dB)	≥55					
Connector Standard	IEC 61755 (grade C)					
Operating temperature (°C)	-40~+85					
Storage temperature(°C)	-40~+85					

Note1: Focus on uniform distribution device; the fiber type is single-mode optical fiber.

Note2: All parameter tests without connectors.

1.6 LC/APC ADAPTER Duplex FLANGELESS, GREEN

1.6.1 General properties:



1.6.2 Technical parameter

Type	LC/APC
Insert loss (dB)	≤0.15
Interchangeability (dB)	≤0.20
Material of sleeve	Ceramic
Operating temperature (°C)	-5~+60
Storage temperature (°C)	-5~+60
Durability	>500 times
Industrial standard	IEC 61754-20

1.7 Optical fiber

G657A1 fiber

Category	Description	Specifications	
		Before cable	After cable
Optical Specifications	Attenuation @1310 nm	≤0.35 dB/km	≤0.40 dB/km
	Attenuation @1550 nm	≤0.21 dB/km	≤0.30 dB/km
	Zero Dispersion Wavelength	1300~1324 nm	
	Zero Dispersion Slope	≤ 0.092 ps/nm ² ·km	
	Cable Cutoff Wavelength (λ _{cc})	≤1260 nm	
	Macro Bending Loss (10 turns; Φ30 mm) @1550 nm	≤ 0.25 dB	
	(10 turns; Φ30 mm) @1625 nm	≤ 1.0 dB	
	(1 turns; Φ20 mm) @1550 nm	≤ 0.75 dB	
(1 turns; Φ20 mm) @1625 nm	≤ 1.5 dB		
Mode Field Diameter @1310 nm	(8.6~9.5)±0.4μm		
Dimensional Specifications	Cladding Diameter	125±1μm	
	Cladding Non Circularity	≤1.0%	
	Core/Clad Concentricity Error	≤0.5μm	
Mechanical Specifications	Proof Stress	≥1.05%	

1.8 Test Standard

No.	Test	IEC reference
1	LC Connector	IEC 61754-20,TIA 604-10-A
2	Attenuation(random mate)	IEC 61300-3-34
3	Return loss(coupler method)	IEC 61300-3-6
4	Vibration(sinusoidal)	IEC 61300-2-1
5	Cold	IEC 61300-2-17
6	Dry heat(endurance)	IEC 61300-2-18
7	Damp heat(cyclic)	IEC 61300-2-30
8	Change of temperature	IEC 61300-2-22
9	Flexing of the strain relief of fibre optic devices	IEC 61300-2-44
10	Fibre/cable retention	IEC 61300-2-4
11	Impact(method A)	IEC 61300-2-12
12	Tensile strength of coupling mechanism	IEC 61300-2-6
13	Static side load	IEC 61300-2-42
14	Mating durability	IEC 61300-2-2
15	Dust	IEC 61300-2-27
16	Torsion	IEC 61300-2-5
17	Bending moment	IEC 61300-2-7
18	Salt mist	IEC 61300-2-26