

# XC/UPC-SC/UPC Connectors Transparent Bow Type Cable (Pre-adhesive Cable) Datasheet

Building an Efficient Fiber Infrastructure.

## Overview

The indoor pre-connected transparent bow type cable (pre-adhesive cable) with hot melt adhesive is suitable for indoor cabling scenarios. It can be routed in exposed manner or through a pipe. It can be rapidly deployed on applicable surfaces. After routing the optical cable, use adhesive or cable clips fixed. It has an elegant appearance, does not affect residence decoration and can be conveniently routed on various decoration materials.

### CAUTION

- Do not leave the optical cable in a vehicle exposed to sunshine. The adhesive will melt at a temperature higher than 60°C and cause optical cable adhesion so that construction is impossible.
- For details about how to construct the transparent optical cables, see the [01523843 FIK01 FTTR Fiber Installation Kit and Transparent Cable Construction Guide](#).

## Features & Benefits

- With hot melt adhesive, facilitating indoor exposed cable routing
- High tensile strength, also suitable for pipe routing in homes
- Using Huawei XC connectors with a diameter less than 7.5 mm, facilitating indoor pipe routing
- Transparent optical cable, elegant without negative impact on residence decoration
- Stable performance in various environments

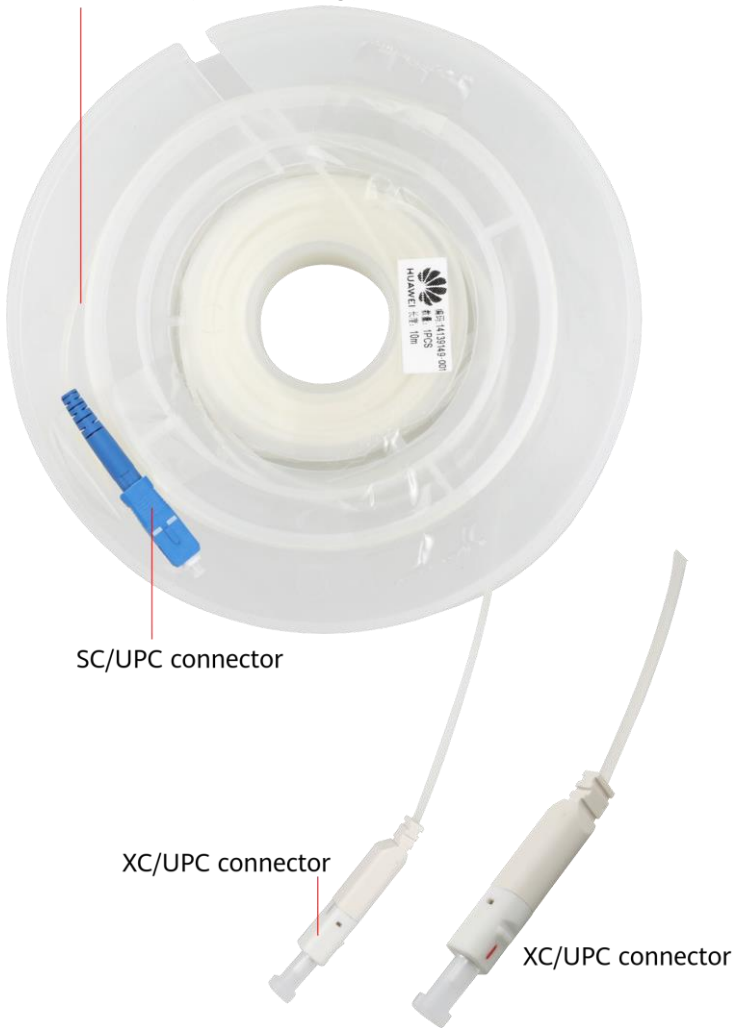
## General Specifications

Cable assembly type	Patch cord
Environment	Indoor
Packaging	Separate packing
Application	Indoor
Termination	XC/UPC-SC/UPC
Working temperature range	-10°C to +60°C
Working humidity	0% to 95%
Transport temperature range	-40°C to +60°C

# Structure

## Dual-ended Pre-connected Transparent Bow Type Cable

1.2 x1.6 mm transparent bow type cable

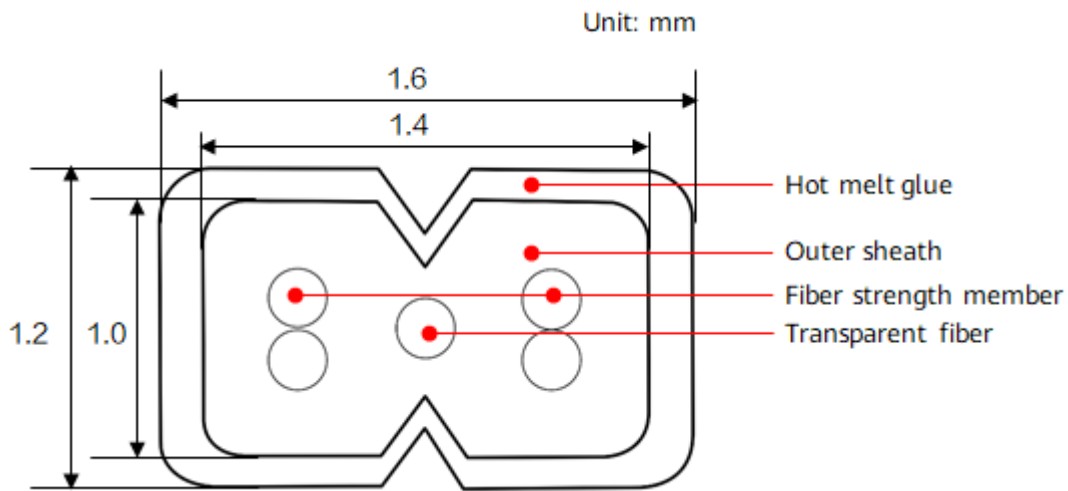


### NOTICE

**Transparent optical cable is a pre-adhesive cable. It needs to be installed in three steps:**

- Attach corner protector to the corners along the cabling path in advance ensure bending radius  $\geq 5\text{mm}$ .
- Fiber installation kit can be used to lay the cable on suitable walls to achieve preliminary fixation.
- Must use cable clips or adhesive to reinforce corners and door gap to achieve reliability.
- If necessary, the straight laying patch can also be reinforced to achieve higher reliability.

## Cross Section

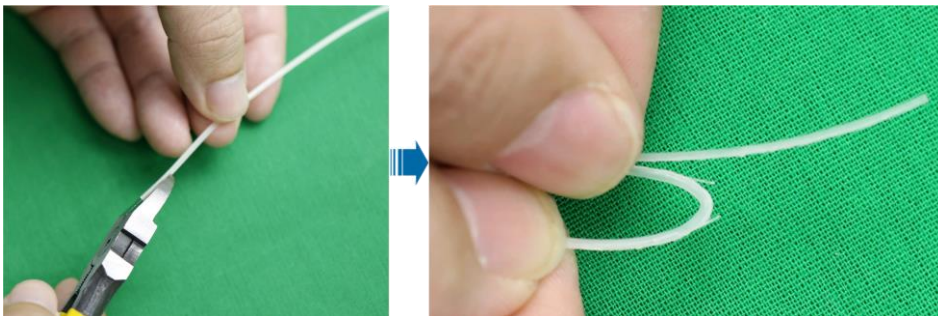


GJXFN - G.657A2

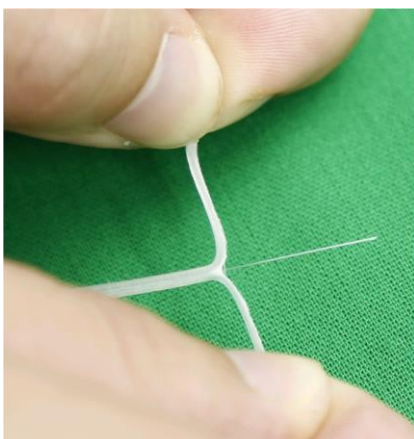
## Strip the Optical Cable



Step 1 Use diagonal pliers to cut the optical cable from the middle, bend the sheath at the initial stripping point by about 180 degrees until the optical fiber is broken and the bare fiber is exposed, as shown in the following figure.



Step 2 Remove the sheath, and expose the bare fiber by 45–50 mm.



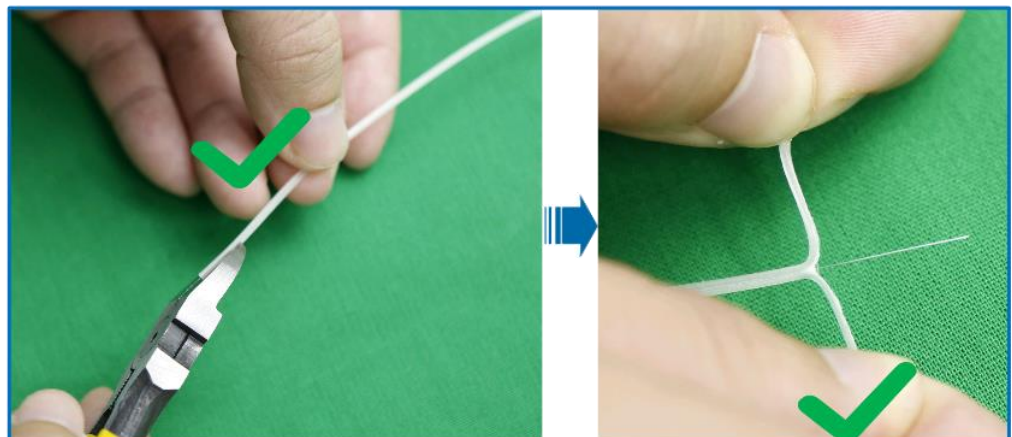
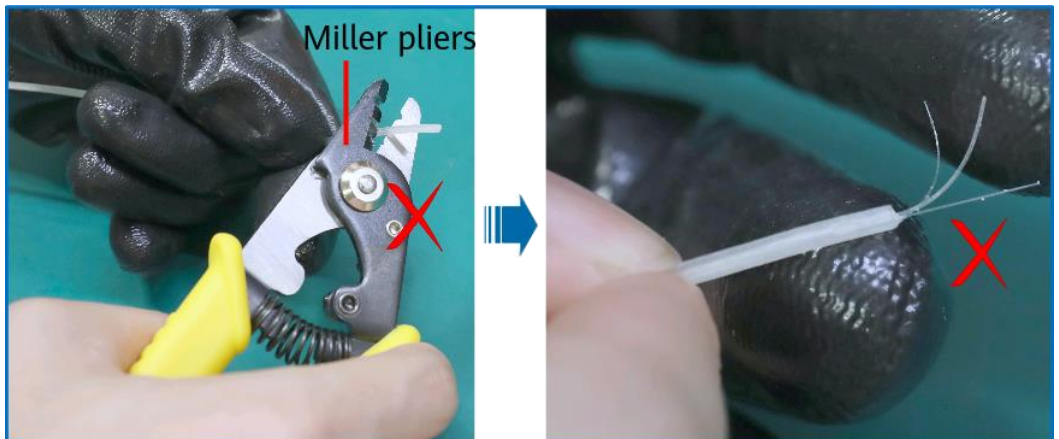
**NOTE**

- Stripping a 1.2 mm x 1.6 mm transparent optical cable: Use diagonal pliers to cut the sheath in the middle and split the sheath by hand, and then cut off the sheath. Do not use the 2 mm x 1.6 mm optical cable stripper in the FTK01 to strip the sheath.

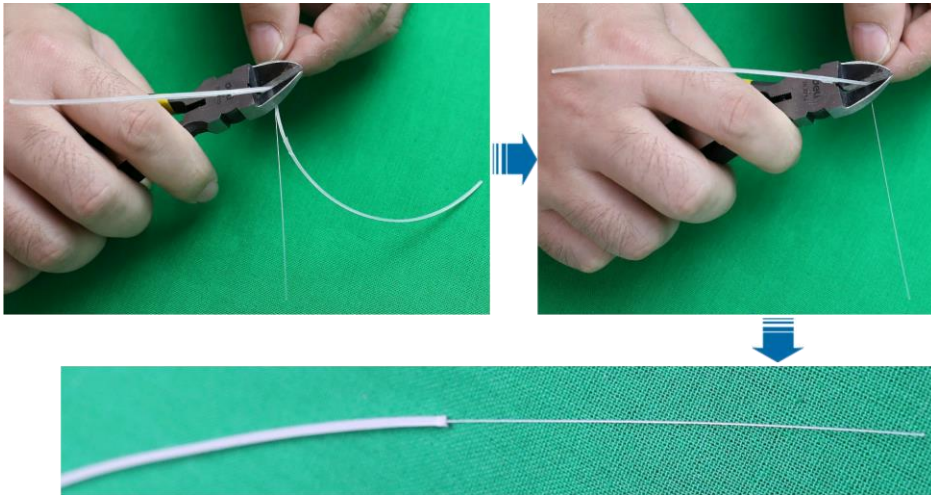
Do not use the 2 mm x 1.6 mm optical cable stripper in the FTK01 to strip the 1.2x1.6mm transparent cable sheath.



- Do not use Miller pliers to strip transparent optical cables. Use diagonal pliers to cut the sheath in the middle and split the sheath by hand, and then cut off the sheath.



Step 3 Cut off the extra sheath of the optical fiber and ensure that the end faces of the sheath on both sides are flush.




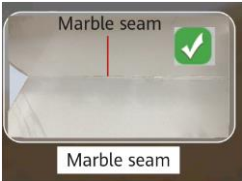



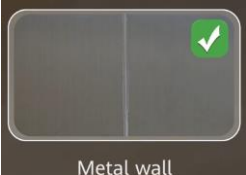
**NOTICE**

Do not use the tip of the diagonal pliers to cut the sheath. Otherwise, the optical fiber may be damaged.

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### Wall Surfaces Recommended for Construction





Wall Surfaces Recommended for Construction

Scenario	Picture	Scenario	Picture
Latex paint		Marble seam	
Wooden wall		Diatom mud	
Wallpaper		Metal wall	

## Not allowed construction

### Not allowed construction

Scenario	Description	Picture
Stone wall surface	Do not deploy the optical cable on a stone wall surface which is uneven and cannot attach the optical cable securely.	
Concrete wall surface	Do not deploy the optical cable on a concrete wall which is coarse and flaky and cannot attach the optical cable securely.	
Weak attaching scenario	If the surface is made of smooth materials such as glass cement, glass, and glazed marble, the hot melt adhesive cannot be attached to the background. Therefore, it is not recommended that the transparent optical cable be routed on such surfaces.	
Organic resin base material wall	Organic resin base material walls (also called imitation marble plates), including epoxy resin base material wall, epoxy floor paint, and unsaturated resin base material wall	
Flammable, non-temperature resistant, and soft surfaces	The temperature of the fiber installation kit (hot-melt adhesive tool) is high during working. If the surface is made of flammable or non-high-temperature-resistant materials, such as soft wallpaper (EPP material), or PVC resin wallpaper, the wall may be burnt or damaged. Therefore, you are not recommended to use the hot-melt adhesive tool on such surfaces.	

Scenario	Description	Picture
Passing through the upper side of a multi-layer door frame	If there is no seam or space for routing the optical cable on the top of a door frame, do not route transparent optical cables there.	
Aluminum alloy door frame	An aluminum alloy door frame with a sliding door will definitely break the optical cable. Therefore, do not route transparent optical cables there.	
Dusty and low-adhesion surface	For dirty walls that cannot be cleaned, coarse diatom mud walls*, granular walls, and other walls with rough surfaces, hot melt adhesive may not be able to attach the optical cable. Therefore, do not route transparent optical cables there.	
Flaky wall surface	If a wall may become moist due to seasonal changes, the wall surface may flake off. Therefore, do not route transparent optical cables there.	
Non-indoor scenario	Transparent optical cables cannot be routed outdoors, through pipes (pulling force $\geq 40$ N), or vertically.	

## NOTICE

- \*Considering the diversity of materials and techniques of home decoration, construction personnel need to further judge whether the construction can continue based on the actual state and adhesion effect of the construction surface.
- If a scenario is not listed in Table 1 or Table 2, confirm with Huawei before performing the construction.

## Specifications

### Dimensions and Descriptions of Cable Constructions

<b>Fiber</b>	<b>Count</b>	1
	<b>Type</b>	G.657A2
	<b>Color</b>	Transparent
<b>Strength member</b>	<b>Material</b>	Fiber
	<b>Color</b>	Transparent

Outer sheath	Color	Transparent
Cable diameter		1.0 x 1.4 mm
Cable with hot-melt adhesive layer diameter		1.2 x 1.6 mm
Cable weight		Approx. 6 kg/km
Cable length		0.5 m, 10 m, 15 m

## Mechanical Performance of Cable

Tensile performance (short-term / long-term, N)	100 / 80
Crush (short-term, N/100mm)	500
Min. bending radius (static / dynamic, mm)	16 / 32

## Connector Specifications

Item	Connector1	Connector 2
Type	XC/UPC	SC/UPC
Insertion loss	Max. ≤ 0.5 dB	
Return loss	≥ 50 dB	
Tensile strength between optical cable and connector	Load: 50 N Duration: 60s	Load: 30 N Duration: 60s
Impact	Drop height: 1.5 m Number of drops: 5 for each plug	
Static side load	Load: 1 N Duration: 1 h	

### NOTE

1. The IL in the table refers only to the connector IL. The product IL must contain the connector IL and fiber IL.  $IL_{all} = 2 \times IL_{connector} + IL_{(1 \text{ km optical cable IL})/1000 \times L_{(optical \text{ cable length})}}$

## Fiber Specifications

Fiber mode	Single mode
Maximum attenuation	1310nm: 0.37dB/km 1550nm: 0.24 dB/km

## Standards

Test standard	IEC61753 series, IEC60794 series, ITU-T G.657
RoHS 2.0	Compliant




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