# Dual-ended SC 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 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 70ºC and cause optical cable adhesion so that construction is impossible.
- For details about how to construct the transparent optical cables, see the hyperlink *01523843 FIK01 FTTR Fiber Installation Kit and Transparent Cable Construction Guide*.

### Features & Benefits

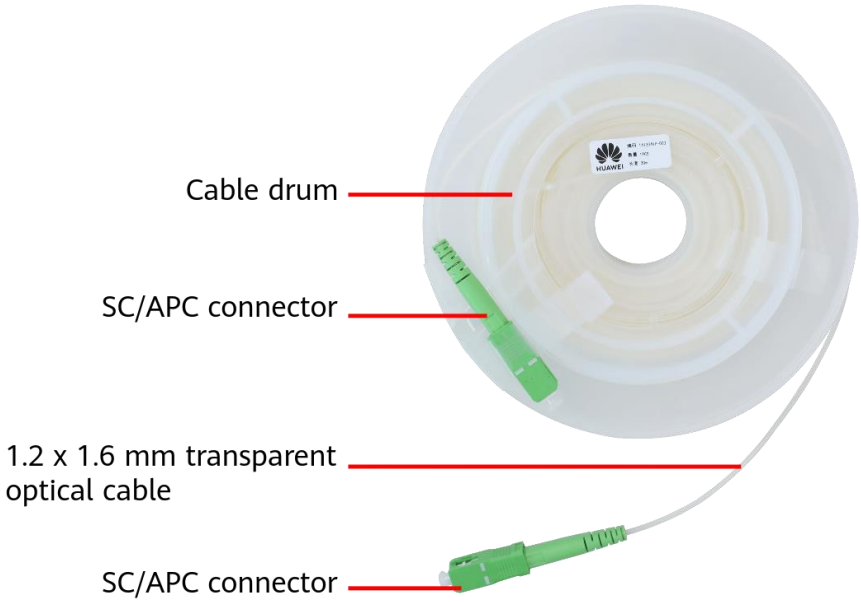
- With hot melt adhesive, facilitating indoor exposed cable routing
- Transparent optical cable, elegant without negative impact on residence decoration
- Outer sheath of the cable meets flame-retardant requirements
- Stable performance in various environments

### General Specifications

| | |
|---|---|
| **Cable assembly type** | Patch cord |
| **Environment** | Indoor |
| **Packaging** | Separate packing |
| **Application** | Indoor |
| **Termination** | Dual-ended SC/APC |
| **Working temperature range** | -10ºC to +60ºC |
| **Working humidity** | 5% RH to 93% RH |
| **Min. Installation Temperature** | -10ºC |
| **Transport temperature range** | -10ºC to +70ºC |

# Structure

## Dual-ended Pre-connected Transparent Optical Cable (Pre-adhesive Cable)




NOTICE

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

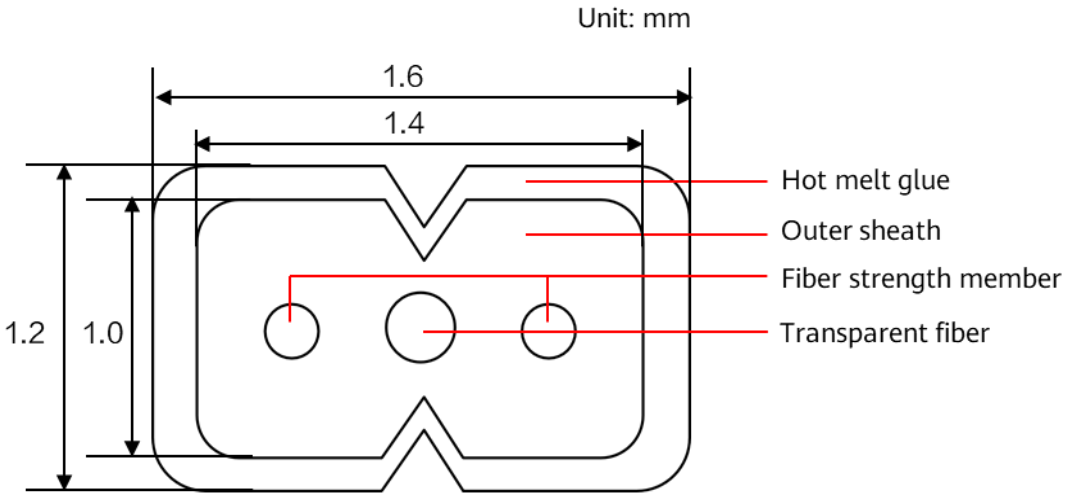
Step 1: Attach corner protector to the corners along the cabling path in advance ensure bending radius≥5mm

Step 2: Fiber installation kit can be used to lay the cable on suitable walls to achieve preliminary fixation

Step3: Must use cable clips or adhesive to reinforce corners and door gap to achieve reliability.

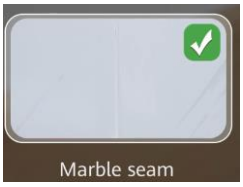
If necessary, the straight laying patch can also be reinforced to achieve higher reliability.

## Cross Section



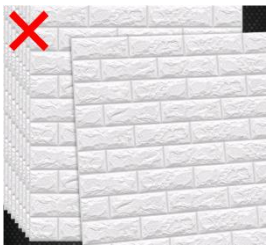

**GJFXN - G.657B3**

## Wall Surfaces Recommended for Construction

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

## 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 course and flaky and cannot attach the optical cable securely. |  |

| Scenario | Description | Picture |
| --- | --- | --- |
| 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. |    |
| 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. |   |
| 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 ≥ 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 Wall Surfaces Recommended for Construction or Not allowed construction, confirm with Huawei before performing the construction.

# Specifications

## Dimensions and Descriptions of Cable Constructions

| | | |
|---|---|---|
| **Fiber** | **Count** | 1 |
| | **Type** | G.657B3 |
| **Strength member** | **Material** | Bare fiber |
| **Outer sheath** | **Material** | Flame-retardant TPU |
| | **Color** | Transparent |
| **Cable diameter (mm)** | | 1.2 x 1.6 |
| **Cable length (m)** | | 10, 15, 20, 30, 40, 50 |
| **Cable weight (kg/km)** | | Approx. 6 |
| **Flammability** | | Meets the vertical flame-retardant requirements of a single cable. Complies with the CPR Eca standard. |

## Mechanical Performance of Cable

| | |
|---|---|
| **Tensile performance (short-term / long-term, N)** | 50 / 20 |
| **Crush (short-term, N/100 mm)** | 500 |
| **Min. bending radius (static / dynamic, mm)** | 10 / 20 |
| **Torsion (N)** | 20 |

## Connector Specifications

| **Item** | **Connector 1 and connector 2** |
|---|---|
| **Type** | SC/APC |
| **Insertion loss** | ≤ 0.3 dB |
| **Average value of interchangeability (used for link budget)** | ≤ 0.25 dB |
| **Return loss** | ≥ 60 dB |
| **Pull** | Load: 20 N, 5 N/s<br>Duration: 60s |
| **Impact** | Drop height: 1.5 m<br>Number of drops: 5 for each connector |

| | |
|---|---|
| **Static side load** | Load: 1 N<br>Duration: 1 h |

## Fiber Specifications

| | |
|---|---|
| **Fiber mode** | Single mode |
| **Maximum attenuation** | 1310nm: 0.37 dB/km<br>1550nm: 0.24 dB/km |
| **Color** | Transparent |

## Standards

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



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