Invisible Drop Cable Solution
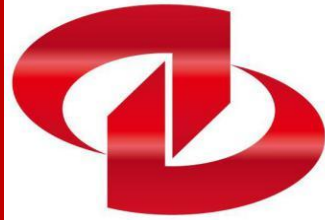
Specification of Product

Ver.0.1

October 2020

NTSPEC-IDCS-24-V1R202001

General Requirements

Invisible drop cable is an innovative micro drop cable solution that allows service providers to bring FTTH service to existing living units/offices in a faster and easier fashion. Invisible Drop reduces a carrier's installation costs and minimises the disruption and aesthetic dissatisfaction often associated with retrofitting service cables in existing living units.
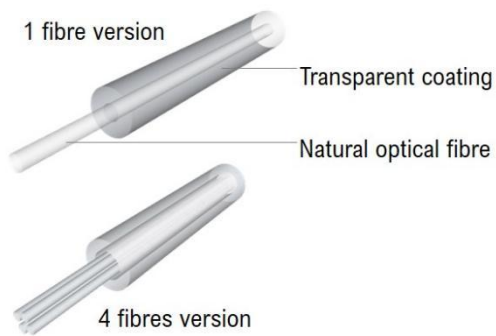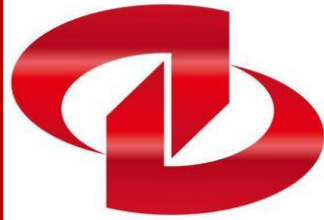
Invisible Drop Cable

- 900 μm round type
- Zero bend-loss optical fiber: G657B3
- Transparent colour
- Hard and resilient buffer material
- Environmentally and mechanically stable

Invisible, Fast, Simple.

The zero-bend-loss (ZBL) fibre and corner clips

Corner Clip

- Plastic (flame retardarnt)
- Double sided adhesive tape
- Transparent colour
- Grip cable
- Cable can be side in/out

Flat Elbow Bend   External Corner   Internal Corner

Epoxy Glue

- Material hardens naturally
- Supporting adhesion of cable on surface
- Flame-retardant

Invisible Solution, Visible Value

Invisible drop consists of a new 900 μm drop cable with ZBL fibre (compatible with G.657.B3 and G.657.A2), the most advanced bend-resistant fibre. The translucent cable is easily attached to a variety of wall surfaces using two types of simple and discrete corner clips. The pathway management tool kit provided with invisible drop includes a variety of these clips along with a small tube of specially formulated epoxy which can be applied at discrete points along the cable or smeared like painters caulk. This results in a truly invisible installation that may be painted by the homeowner if desired.

Fibre count	Up to 4
Fibre Type	G.657.A1, G.657.A2, OM1, OM2, OM2+, OM3, OM4, OM5
Fibre colour	Natural
Secondary coating material	UV curable acrylate
Secondary coating colour	Natural

Internation Standard

Cable outer diameter	0.9	[mm]	
Max. Loading (Short Term)	10	[N]	EN 60794-1-21-E1
Max. compressive loading 1F	250	[N/10cm]	EN 60794-1-21-E3
Max. compressive loading 2-4F	50	[N/10cm]	EN 60794-1-21-E3
Kink*	5	[mm]	EN 60794-1-21-E10
Min. bend radius not load	10	[mm]	EN 60794-1-21-E11
Operating temperature range	-40℃~+80℃	[°C]	EN 60794-1-22-F1
Storage temperature range	-40℃~+80℃	[°C]	EN 60794-1-22-F1
Cable Weight (calc.) 1F	0.8	[kg/km]	
Cable Weight (calc.) 4F	1.0	[kg/km]	

Invisible Optical Cable Parameter

	Items		Parameters
Optical Fiber Parameter	Attenuation Coefficient	@ 1310 nm	≤ 0.35 dB/km
		@ 1383 nm	≤ 0.35 dB/km
		@ 1490 nm	≤ 0.30dB/km
		@ 1550 nm	≤ 0.21 dB/km
		@ 1625 nm	≤ 0.23 dB/km
	Optical Fiber Cutoff Wavelength		≤1260nm
	Zero-dispersion Wavelength		1300~1324 nm
	Zero-dispersion Slope		≤ 0.092 ps/(nm^2.km)
	Cable Size		0.9mm
	Attenuation Coefficient	@ 1310 nm	≤ 0.35 dB/km
		@ 1383 nm	≤ 0.35 dB/km
		@ 1490 nm	≤ 0.30dB/km
		@ 1550 nm	≤ 0.25 dB/km
		@ 1625 nm	≤ 0.28 dB/km

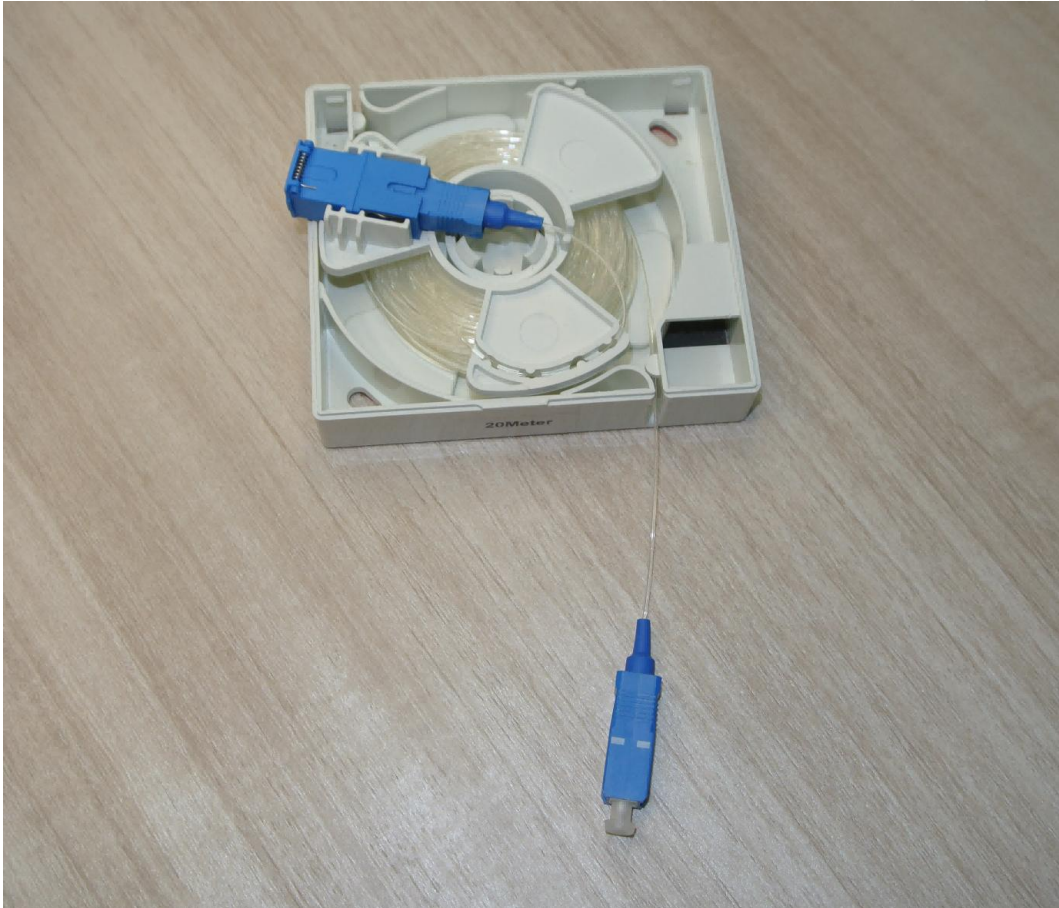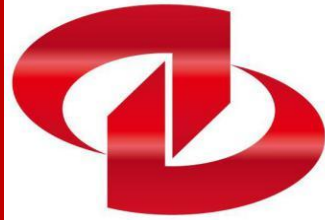## FTTR Solution-Invisible Cable with Outlet Box

■ Manual

1. Drill two holes in the appropriate locations on the wall, insert the anchors, and secure the Rosette with two screws.
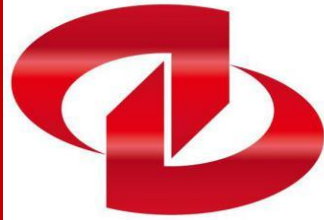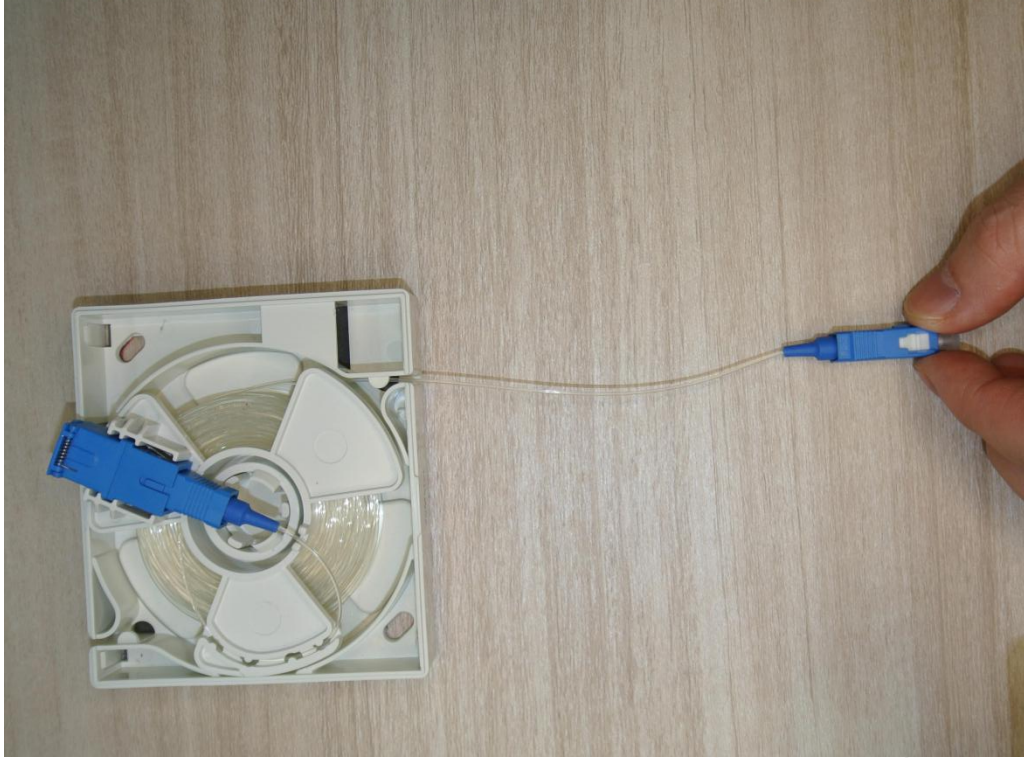
2. Remove the connector from its packaging, turn the wheel, and insert the transparent cable into the groove of the Rosette, continuing to pull it steadily.

3. Pull the connector until it reaches the ONU and plug it in, securing the transparent cable along the way with cable clips.

4. Insert the pre-connectorized drop cable into the Rosette, and then cover it.

5. Completed.