



FIBERMANIA

Shenzhen FiberMania Technology Co., Ltd.  
optical-fibercables.com

## Outdoor ODC to LC 4-Core Single Mode TPU Jacket Fiber Patch Cable

Our Product Introduction

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### Basic Information

- Place of Origin: CN
- Brand Name: FiberMania
- Certification: RoHS, CE, ISO9001
- Minimum Order Quantity: 10
- Price: 4.8 - 7.99
- Packaging Details: Standard Packing
- Delivery Time: 7-15 days
- Payment Terms: L/C, D/A, D/P, T/T, Western Union, MoneyGram



### Product Specification

- Connector A: ODC Plug
- Connector B: LC/UPC
- Fiber Count: 4 Core
- Mode: OS2 9/125μm
- Wavelength: 1310/1550nm
- Fiber Grade: G.652D/G657.A
- Cable Diameters: 4.8mm
- Min. Bend Radius: 20/10D (Dynamic/Static)
- Attenuation At 1310nm: 0.36 DB/km
- Attenuation At 1550nm: 0.22 DB/km
- Operating Temperature: -20 To 70°C
- Storage Temperature: -40 To 80
- Highlight: Outdoor ODC to LC fiber cable,  
4-core single mode patch cable,  
TPU jacket FTTA fiber optic



### More Images



## Product Description

### Product Description

**Fiber-to-the-Antenna (FTTA)** is a modern wireless site architecture in which optical fiber replaces traditional heavy coaxial cables and is routed directly up the tower. Key components such as Remote Radio Units (RRUs) are installed at the top of the tower instead of at the base station, significantly reducing signal loss and improving overall network performance. FiberMania's FTFA solutions provide robust cable connectivity and electrical protection for Remote Radio Head (RRH) equipment deployed on cellular towers, rooftops, and other outdoor structures. Our FTFA patch cords typically contain two single-mode fibers, with one end terminated using IP-series waterproof connectors and the other end equipped with standard RRU-compatible connectors such as LC duplex.

We offer both fully assembled factory-terminated FTFA patch cables and a wide selection of outdoor-rated connectors for rapid on-site installation. Available connector types include IP Series, ODVA, OptiTap, H-Connector, ODC, RDC, AARC, FullAXS, RFE, IP-FX, Mini-SC, PDLCL, NSN, and various other field-deployable tactical connectors.

### Features

Manufactured with high-grade low-loss fibers (e.g., Corning G.657A1) to ensure stable and reliable optical transmission. Provides insertion loss  $\leq 0.3$  dB and SM return loss  $\geq 50$  dB, effectively minimizing reflection and energy loss for optimal performance.

Achieves IP67+ protection, delivering strong resistance to rain, moisture, and challenging outdoor weather conditions.

UV-resistant design ensures long-term durability under continuous exposure to sunlight.

Rugged construction resists crushing and mechanical stress, protecting fibers from damage during installation or use.

Highly flexible with G657A1/A2 fibers, enabling tight bends and complex routing without performance degradation.

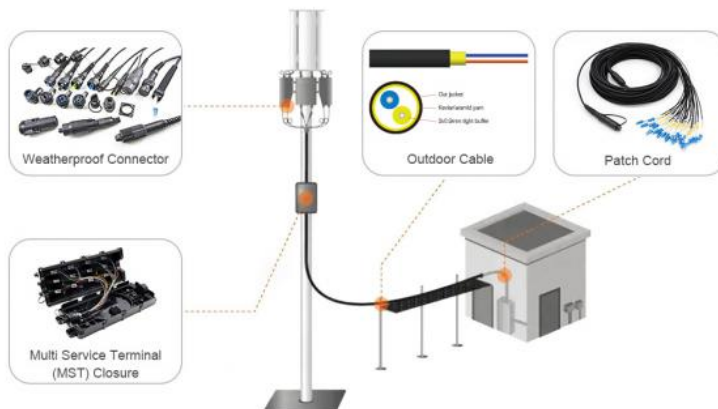
Equipped with quick-connect interfaces such as LC and SC for fast installation and easy maintenance.

Wide operating temperature range ( $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ ) and storage range ( $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ ); dustproof and corrosion-resistant for complex outdoor environments.

### Specification

| Parameter Category        | Specific Parameter             | Detailed Specifications                                                                                               | Test Standard/Remarks                                                                                                                                   |
|---------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Optical Characteristics   | Fiber Type                     | G.652D, G.657A1, G.657A2 (Single-mode 9/125 $\mu\text{m}$ ); Bend Insensitive(Multimode)                              | Supports CPRI protocol high-speed transmission                                                                                                          |
|                           | Operating Wavelength           | 1310nm, 1550nm(Single mode)<br>850nm, 1300nm(Multimode)                                                               | Typical attenuation:<br>$\leq 1\text{dB/km}$ @1310nm; $\leq 1\text{dB/km}$ @1550nm(SM)<br>$\leq 1\text{dB/km}$ @850nm; $\leq 1\text{dB/km}$ @1300nm(MM) |
|                           | Insertion Loss                 | $\leq 0.3\text{dB}$                                                                                                   | IEC 61300-2-4 standard                                                                                                                                  |
|                           | Return Loss                    | $\geq 50\text{dB}$ (UPC); $\geq 60\text{dB}$ (APC); $\geq 35\text{dB}$ (UPC)                                          | Minimizes signal reflection                                                                                                                             |
| Connector Performance     | Connector Type                 | LC, SC, FC, ST (with IP67 waterproof seal)                                                                            | 1/6-turn bayonet quick connection, gloved operation compatible                                                                                          |
|                           | Ferrule Material               | Zirconia Ceramic                                                                                                      | Ensures endface precision and wear resistance                                                                                                           |
|                           | Polishing Method               | PC, UPC, APC                                                                                                          | Adapts to different return loss requirements                                                                                                            |
| Mechanical Performance    | Tensile Strength               | Short-term: 400N; Long-term: 200N                                                                                     | Meets outdoor installation tensile stress requirements                                                                                                  |
|                           | Compressive Load               | Short-term: 2000N; Long-term: 3000N                                                                                   | Resists external extrusion damage                                                                                                                       |
|                           | Bending Radius                 | Dynamic: 20mm; Static: 10mm(SM)<br>Dynamic: 10mm; Static: 5mm(MM)<br>Operating: 70mm; Installation: 125mm (5mm cable) | Narrow space installation adaptability                                                                                                                  |
| Environmental Performance | Operating Temperature Range    | $-40^{\circ}\text{C}\sim+65^{\circ}\text{C}$ (Extreme); $-20^{\circ}\text{C}\sim+70^{\circ}\text{C}$ (Standard)       | Covers high altitude, desert, etc.                                                                                                                      |
|                           | Storage Temperature Range      | $-40^{\circ}\text{C}\sim+80^{\circ}\text{C}$                                                                          | Ensures long-term inventory stability                                                                                                                   |
|                           | Installation Temperature Range | $-20^{\circ}\text{C}\sim+65^{\circ}\text{C}$                                                                          | Construction environment temperature limit                                                                                                              |

### Applications



Serves as a critical link in 4G and 5G base stations—connecting AAU to DU (5G) and RRU to BBU (4G) for stable high-speed signal transmission.

Enables efficient optical communication between essential components in distributed base station systems, supporting flexible site deployment.

Facilitates long-distance signal delivery between base station equipment and antennas in wireless access networks, including WiMAX.

Suitable for outdoor horizontal and vertical cabling on building exteriors, communication towers, and other elevated structures.

## Quality Control and Testing Program



## Production Line and Equipment



## Certifications



## Packing & Shipping



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