



## **One-stop FTTX Solution Products Service**

- Single-fiber Installation Assembly Connector Solution
  - High-density Multi-fibers Cabling Solution
  - Outdoor Waterproof IP68 FTTX Solution



# NEATEL

Your Trusted Fiber Optic Connectivity Solution Partner

## **Company Profile**

NEATEL is a optical communication enterprise with highly working experience for active optical cable in fiber optic industrial, a worldwide one-stop provider of high-speed mixed signal transmission and fiber optic connectivity business for 8 years. Our Pro-AV solution has long-standing commitment in delivering superior professional services to our Audio Video project. For our MULTI-FIBER Cabling Solution helps customers installed well their FTTX project inquired by high density, high bandwidth, high performance in this 5G/8K fiber-hungry era.

We have production facility, top engineering work process control the quality releasing. NEATEL leading of Multi-fiber interconnect solutions extended from network structured cabling to disparate fields for FOCUSING ON INNOVATION FIBER OPTIC TECHNOLOGIES TO DIFFERENT END USERS GLOBALIZATION.

We are dedicated to provide engineering excellence in fiber optic multi-fiber application by integrating experience, integrity and quality into every project. We create value for our customers through proprietary production knowhow, unique engineering process and advance process control. Our commitment on delivering unbeatable quality and performance distinguishes us as a leader of the multi-fiber termination solutions provider.

**Company Mission:** Fiber Connect Future

**Company Vision:** High-tech up your business



# Fiber to The Home



**WORRY-FREE  
QUALITY**



**KIND  
SERVICE**



**RELIABLE  
CORPORATION**

# **What we service**

## **I - Single-fiber Installation Assembly Connector Solution**

- FAOC SC 2.0mm
- FAOC SC 3.0mm
- FAOC SC 900um
- FAOC Application
- Cable Management
- 5G Network Connection

## **II - High-density Multi-fibers Cabling Solution**

- MPO/MTP Trunk Cable
- MPO/MTP Fanout Cable
- MPO/MTP Module Cassette
- MPO/MTP Patch Panel

## **III - Outdoor Waterproof IP68 FTTX Solution**

- EX-MI-SCA
- FLEX-LC
- TAP-SCA-5.0
- FAST-SCA
- NSN-DLC
- EX-ODVA-XX



# Single-fiber Installation Assembly Connector Solution

IL less than 0.25dB design

## V-groove fiber optic technology

High performance and reliability

FAOC SC APC 0.9/2.0/3.0mm



FAC001

FAOC SC UPC 0.9/2.0/3.0mm



FAC002

FAOC SC APC 2.0x3.0mm



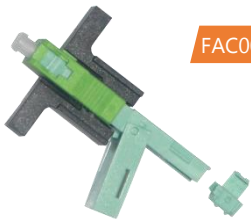
FAC003

FAOC SC UPC 2.0x3.0mm



FAC004

FAOC SC APC 2.0x3.0mm



FAC005

FAOC SC UPC 2.0x3.0mm



FAC006

FAOC SC APC 2.0/3.0mm



FAC007

FAOC SC UPC 2.0/3.0mm



FAC008

FAOC SC APC 900µm



FAC009

FAOC SC UPC 900µm



FAC010

FAOC LC APC 2mm



FAC011

FAOC LC UPC 2.0x3.0mm



FAC012

FAOC SC UPC 2.0x3.0mm



FAC013

FAOC SC APC 2.0x3.0mm



FAC014

FAOC SC APC 2.0x3.0mm



FAC015

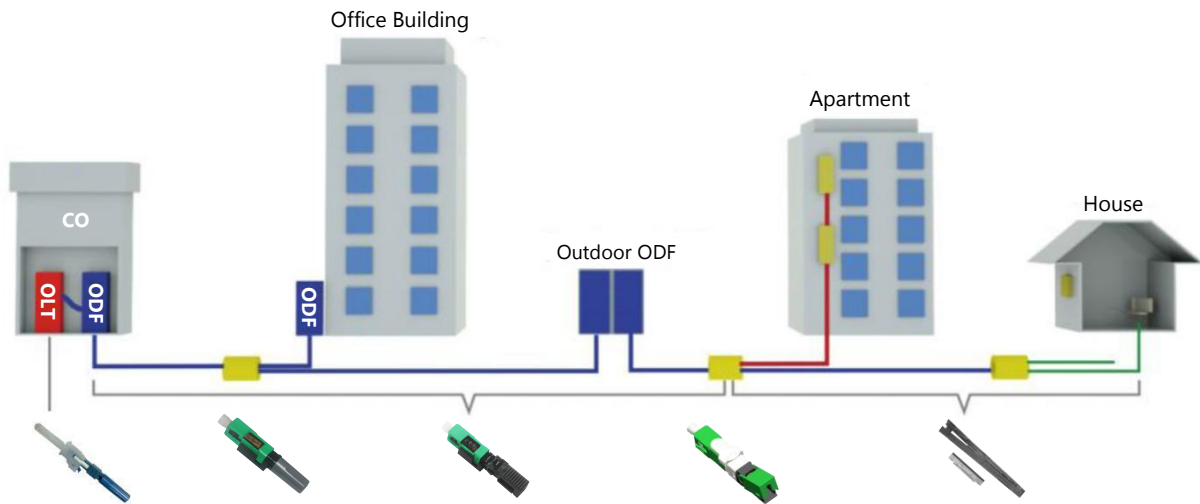
FAOC SC APC 2.0x3.0mm



FAC016

**Notes:** For details of data sheet please do hesitate contact us email [sales@neatel.com](mailto:sales@neatel.com) or call us +008613544289665.

## Application



- From subscriber to outdoor ODF and server room, FAOC connector provide connection solution for whole link.



Subscriber



Pole Operation

- Comprehensive considering operation efficiency, space saving, optical performance, reliability and cost control, FAOC connector has been the premium choice for FTTH.



## Fiber Optical Cable Management



ODF Termination - Before (Patch Cord with fixed length)



ODF Termination - After (Patch Cord with flexible length)

High reliability of FAOC connector can meet the transmission requirement of sever room. The theory of "Cabling first, termination later" and make cable length on site, help to solve cabling problem of serving room.





# 5G Network Connection

FAOC LC APC 2.0x3.0mm

FAOC018

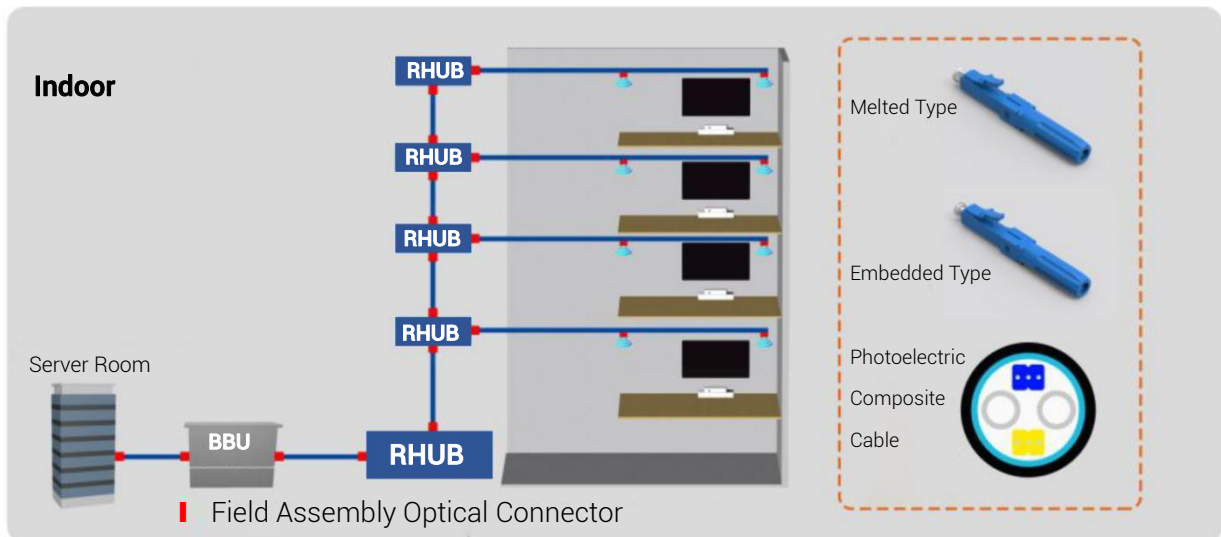
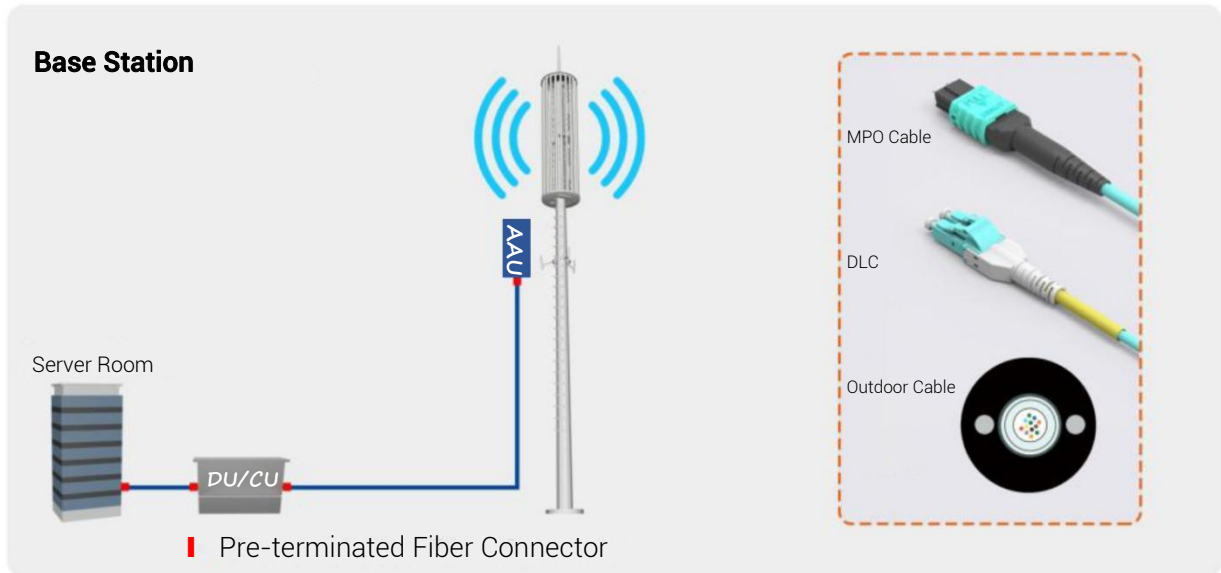


FAOC LC UPC 2.0x3.0mm

FAOC019



## Application




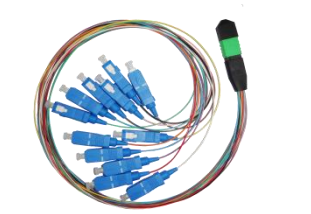
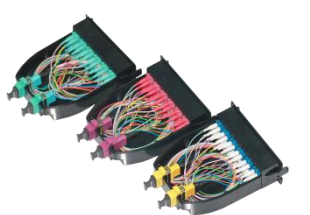
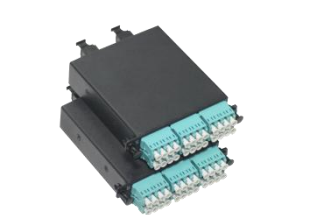










# High-density Multi-fibers Cabling Solution



## Product Overview

12/24F MPO OS2 Trunk	12/24F MPO OM3 Trunk	24F MPO-LC OM3 Fanout	12F MPO-SC OS2 Fanout
			
MPO-LC Modular Cassette	MPO-LC Modular Cassette	144F MPO 1RU Patch Panel	384F MPO 4RU Patch Panel
			
Rack-mounted Patch Panel	HD LC Uniboot OM3	12/24 LC-SC Trunk Cable	Blockless PLC Splitters
			

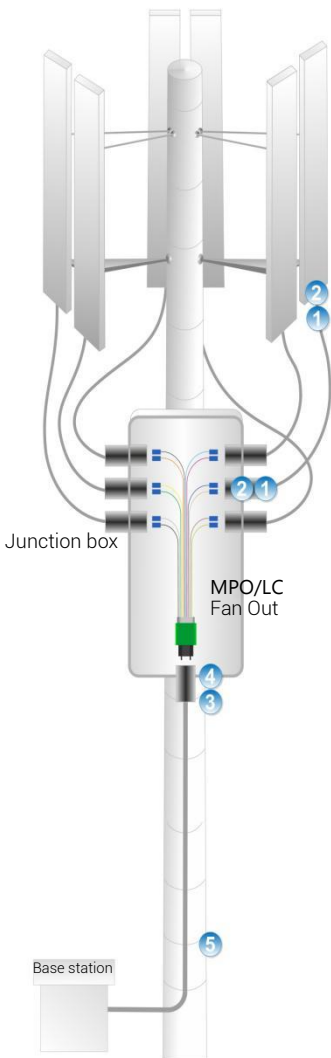
**Notes:** For details of data sheet please do hesitate contact us email [sales@neatel.com](mailto:sales@neatel.com) or call us +008613544289665.

# Outdoor Waterproof IP68 FTTA Solution

## Fiber to the Antenna Solution





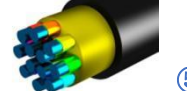


### Antennas



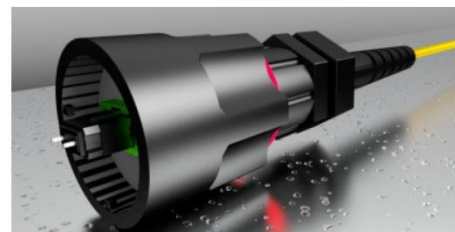
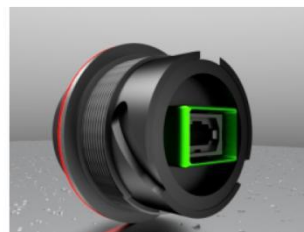
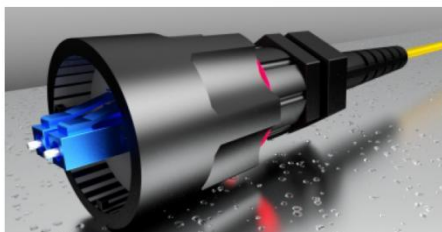
- Complete solution of getting fibers to the antenna;
- Low cost, easy to use solution;
- IP68 Ingress Protection Rating;
- Wide range of operational temperature -40°C/+70°C;
- Chemical resistance;
- Exceed requirements of ODVA;
- Applicable to security technology and other outdoor installation.

NEATEL's layout of FTTA is ready to use and can be plugged to the network quickly and easily without special tools or highly trained person. Rugged outdoor fiber optic connectivity solutions ensure resistance to bad weather and harsh environment (IP68 rating). NEATEL FTTA components may be modified according to customers' demands.

 ①	Ruggedized LC (2 Channels), SM/MM, IP 68, Cable Diameter up to 6 mm
 ②	Ruggedized LC Receptacle, SM/MM, IP 68
 ③	Ruggedized MPO (12 Channels), SM/MM, IP 68, Cable Diameter up to 6 mm
 ④	Ruggedized MPO Receptacle, SM/MM, IP 68
 ⑤	Indoor/outdoor cable, 2 - 12 fibers, Gel-free and waterproof Operating temp. range -40°C/ +70°C Flame retardant jacket, UV light resistant

Ruggedized LC PC Duplex

Ruggedized MPO APC 4 up to 12 Channels





# Outdoor Waterproof IP68 FTTH Solution

## Fiber Access Terminal Box

### Product Overview



With PTLC Adapter



With ODVA-DLC Adapter



With AARC Adapter



With Hardened SC Adapter



With Mini SC Adapter



With Hybrid Solution

## ▶ FTTA / FTTH / FTTX Cable Assembly



What Is FTTA? Fiber To The Antenna FTTA is a broadband network architecture in which optical fiber is used to connect the remote radio head (RRH) or remote radio unit (RRU) to the base station (BBU) in new antennas, or retrofitted in existing ones, to replace all or part of the coax local loop. One advantage of fiber-optic cable is that it is easier to install because it is lighter than coax cable.

### **Fiber to the Antenna Solutions for Macro Cell Sites**

Finally, RRU deployment that makes (dollars and) sense

Diversification for LTE and 5G networks in both macro cells and outdoor small cells are driving the need for versatile options in fiber connectivity to the RRU more than ever before. Choosing the most suitable fiber-to-the-antenna (FTTA) configuration can be time consuming and complex.

NEATEL FTTA solutions encompass a range of options for implementation of RRUs at the top of the tower:

### **Hybrid solutions and Discrete solutions**

Discrete fiber drop cable solutions for outdoor small cell deployments, terminated for connectivity between RRUs and wireline terminals to support convergence for Smart Cities, as well as daisy-chaining between sectors or sites. Discrete plug-and-play fiber enclosure is an all-in-one fiber solution that accelerates deployments and supports up to six RRUs. Discrete fiber and power cabling with installation options as separate runs or using a junction box are economical solutions that provide design flexibility where separate power and fiber configurations are desired. Choose the smart, simple, flexible way to personalize and roll out your FTTA strategy.

Fiber to the home (FTTH), also called "fiber to the premises" (FTTP), is the installation and use of optical fiber from a central point directly to individual buildings such as residences, apartment buildings and businesses to provide unprecedented high-speed Internet access. FTTH dramatically increases the connection speeds available to computer users compared with technologies now used in most places.

While FTTH promises connection speeds of up to 100 megabits per second (Mbps) – 20 to 100 times as fast as a typical cable modem or DSL (Digital Subscriber Line) connection – implementing FTTH on a large scale will be costly because it will require installation of new cable sets over the "last links" from existing optical fiber cables to individual users. Some communities currently enjoy "fiber to the curb" (FTTC) service, which refers to the installation and use of optical fiber cable to the curbs near homes or businesses, with a "copper" medium carrying the signals between the curb and the end users.



## Mini SC Connector and Cable Assembly



### Item Description

Mini SC cable assemblies provide a cost effective, easy, environmental seal and mechanical protection for 1 fiber simplex SC style connections. Inside cover can protect ferrule end face far away scratch when mating with receptacle; Special fool-proofing design make sure Mini SC connector has blind-mating function; One hand Bayonet-style mechanical latch. The assemblies guarantee an easy, one-step connection system with the combined push-pull insertion and bayonet-style mechanical latch. Mini SC provides quick installation solutions and has good performance on mating with Mini SC receptacle. Cable can be armored or non-armored. The industrial panel-mount, plastic adapters serve as a sealed feed-through for the fiber connection. The new industrial integrated flange-mount adapters are designed for tight, side-by-side applications.

### Application

- Telecom;
- CATV;
- LAN & WAN;
- Network;
- Broadband;
- FTTP.

### Features

- Cost effective solution for in house termination;
- IP67 Water immersion and Dust protection for harsh environment;
- Chemical Resistance;
- Simple assembly requiring no special tools;
- Push-pull insertion with bayonet-style mechanical latch provides easy installation and removal;
- Durable mechanical mating, minimum of 500 matings;
- Wide range of operational temperature for outside plant -40°C to+85°C.

## IP-FLEX Connector and Cable Assembly



### Item Description

IP-FLEX sealed connector is a compact outdoor connector that is designed to provide IP-67 water and dust seal over LC Duplex. Applications include connection to Remote Radio Units (RRU/RRH), FTTA equipment and other outdoor systems. The unique design of the housing allows it to be provided on a factory terminated and tested cable assembly. IP-FLEX connector mates to equipment or enclosures that are pre-fitted with the FullAXS style receptacle, providing water and dust sealed interface when mated.

### Applications

- LTE RRH/RRU and Base Stations
- Wimax Radios and Base Stations
- Outdoor Industrial Systems

### Feature

- IP-67 Water and dust protection;
- Factory or field installation;
- -40°C to +85°C Operating Temperature;
- 150 N (33 lbs) Cable Retention;
- Accepts 4.8mm to 5.2mm Cable Diameters;
- No tool installation;
- Bayonet style interface;
- 100minimum mating cycles;
- Flexible cable exit boot.

### Features

- Provides superior weather resistance for FTTA and other outdoor applications;
- Allows flexibility to use factory terminated and tested assemblies;
- Suitable for FTTA and other outdoor temperature extremes;
- Ensures functionality in ice loading situations;
- Can be used with industry standard cable designs;
- Easily installs without special tooling;
- One handed mating, no torque requirements for proper sealing;
- Allows multiple mating to accommodate installation or re-configuration;
- Provides bend protection for installation and long term use.



## SuperTap Connector and Cable Assembly



### Item Description

SuperTap cable assemblies provide the most cost-effective method of deploying optical fiber in outside plant distribution networks at speeds significantly fast than traditional field installations. The assemblies guarantee an easy, one-step connection system with the combined push-pull insertion and nut-style mechanical latch. SuperTap cable assembly provides quick installation solutions and has good performance on mating with SuperTap adapter. Cable can be armored or non-armored. SuperTap connector utilizes optical fiber cables upon which network access points are pre-installed at customer-specified locations along the length of the cable.

### Features

- Provides moisture and dust protection for use in harsh industrial environments;
- IP68 protection, salt-mist proof, humidity proof, dust proof;
- Drastically reduces field splicing with a predetermined loss at each waterproof tether access point;
- Utilize traditional field installation techniques for aerial, below ground and duct applications;
- Reduce installation time by as much as 50 percent per network access point;
- 100% optically tested to ensure quality performance assemblies;
- Available in single mode and multimode styles to work with any common fiber type;
- Broad temperature range (-40 to+85°C) is ideal for indoor or outdoor applications;
- Mark on dust cap can help people who cannot distinguish between colors to operate.

### Applications

- LTE RRH/RRU and Base Stations;
- Wimax Radios and Base Stations;
- Outdoor Industrial Systems.

## Inline Mini SC Connector and Cable Assembly



### Item Description

IN-LINE Mini SC cable assemblies provide an environmental seal and mechanical protection for 1 fiber simplex SC connections. The assemblies guarantee an easy, one-step connection system with the combined push-pull insertion and bayonet-style mechanical latch. IN-LINE Mini SC connector provides quick installation solutions and has good performance on mating with Mini SC plug connector. Cable can be armored or non-armored. The industrial panel-mount, plastic adapters serve as a sealed feed-through for the fiber connection. The new industrial integrated flange-mount adapters are designed for tight, side-by-side applications.

### Features

- Provides moisture and dust protection for use in harsh industrial environments;
- IP68 protection, salt-mist proof, humidity proof, dust proof;
- Sealed panel feed-through design for easy installation into enclosures;
- 100% optically tested to ensure quality performance assemblies;
- Available in single mode and multimode styles to work with any common fiber type;
- Push-pull insertion with bayonet-style mechanical latch provides easy installation and removal;
- Broad temperature range (-40 to+85°C) is ideal for indoor or outdoor applications.

### Applications

- LTE RRH/RRU and Base Stations;
- Wimax Radios and Base Stations;
- Outdoor Industrial Systems.



## NSN-DLC Connector and Cable Assembly



### Item Description

The NSN fiber optic connectors for the new generation wireless base stations pulled far (WCDMA/TD-SCDMA/ WIMAX/ GSM) tailored products that can meet the FTTA (fiber to the antenna) program requirements for outdoor environment conditions and adverse weather conditions. They are well suited for Industrial and Aerospace and Defense applications. The NSN fiber connectors, together with the support optical cable, are becoming the standard interface specified in 3G, 4G and WiMax Base Station remote radios and Fiber-to-the-Antenna applications. The product however, is not limited to the above applications. The NSN cable assemblies have passed tests like salt mist, vibration and shock and meet protection class IP65. They are well suited for Industrial and Aerospace and Defense applications.

### Features

- Standard NSN connector boot;
- Available Singlemode and Multimode;
- IP65 protection, salt-mist proof, humidity proof;
- Aluminum housing, compact design;
- Broad temperature range and wide range of indoor and outdoor Patch cables;
- Easy Operation, reliable and cost-effective Installation;
- The connector of side A is DLC, and side-B can be LC, FC, SC;
- Used for 3G 4G base station BBU, RRU, RRH, LTE.

### Applications

- Widely used in FTTA & FTTH;
- Used for 3G 4G base station;
- BBU, RRU, RRH, LTE.

## ► Extension ODVA-SC/LC Connector and Cable Assembly



### Item Description

Extension ODVA cable assemblies provide an environmental seal and mechanical protection for 1 fiber simplex SC, 2 fibers duplex LC or multi fibers MPO connections. The assemblies guarantee an easy, one-step connection system with the combined push-pull insertion and bayonet-style mechanical latch. Extension ODVA provides quick installation solutions and has good performance on mating with ODVA plug connector. Cable can be armored or non-armored. The industrial Extension ODVA cable assembly has been ratified as a 'Standard Interface' in the ODVA\*(Open DeviceNet Vendors Association) as a next-generation industrial interconnect. The industrial panel-mount, plastic adapters serve as a sealed feed-through for the fiber connection. The new industrial integrated flange-mount adapters are designed for tight, side-by-side applications. A single shutter, available in plastic or metal, is secured inside the adapter to cover single or multi ports and provide dust and laser protection for the internal fiber connection.

### Features

- Provides moisture and dust protection for use in harsh industrial environments;
- IP67 protection, salt-mist proof, humidity proof, dust proof;
- Sealed panel feed-through design for easy installation into enclosures;
- 100% optically tested to ensure quality performance assemblies;
- Available in single mode and multimode styles to work with any common fiber type;
- Push-pull insertion with bayonet-style mechanical latch provides easy installation and removal;
- Broad temperature range (-40 to+85°C) is ideal for indoor or outdoor applications.

### Applications

- LTE RRH/RRU and Base Stations;
- Wimax Radios and Base Stations;
- Outdoor Industrial Systems.



# NEATEL

Tel: 0086.574.8613.6480

Fax: 0086.574.8613.3385

Add: No 7, Lushan West Rd, Daqi Beilun, Ningbo, Zhejiang Province, China 315800

E-mail: [sales@neatel.com](mailto:sales@neatel.com)

Web: [www.neatel.com](http://www.neatel.com)

We are open:

Monday – Friday / 9:00AM – 18:00PM