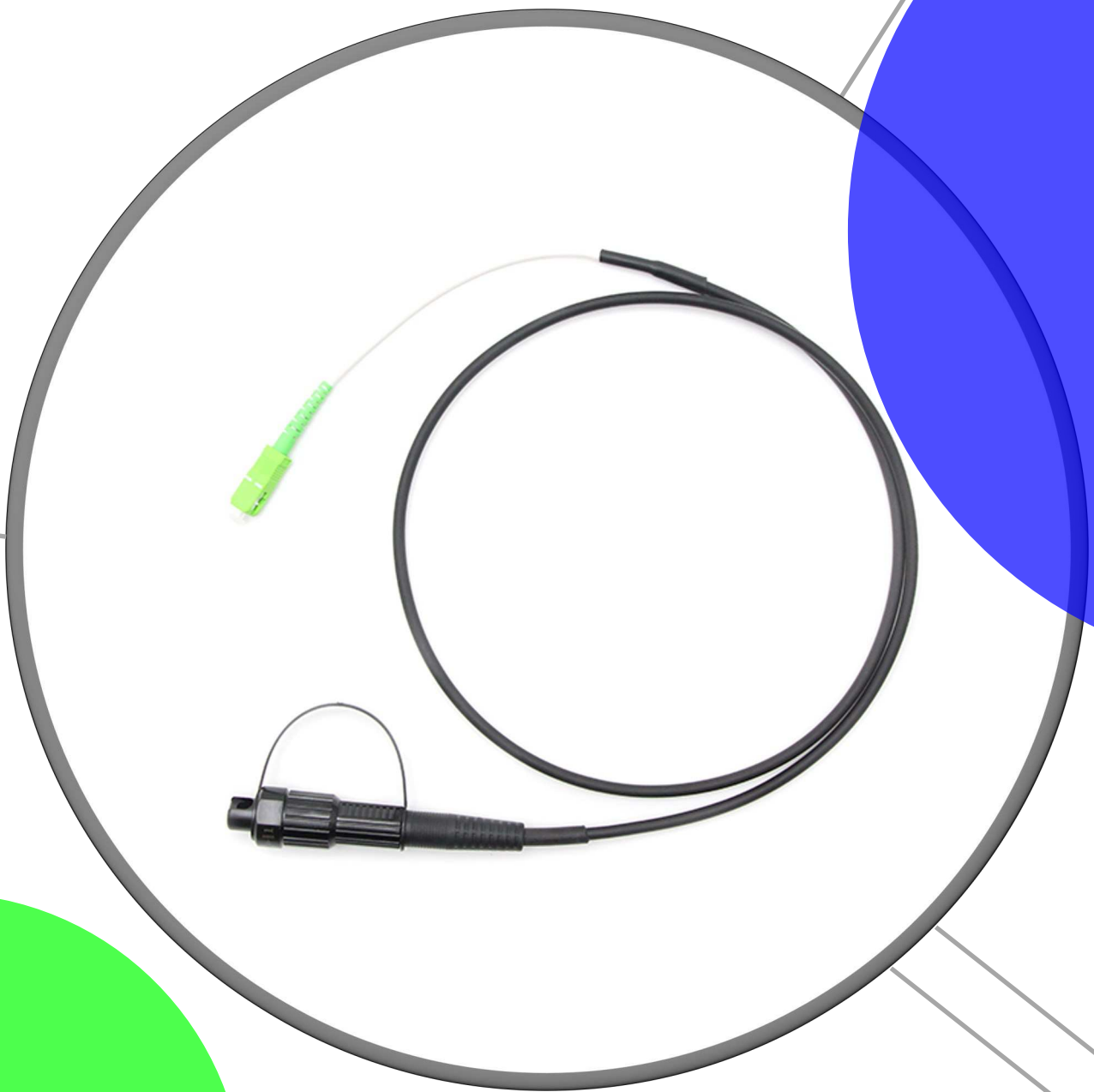


# SPECIFICATION

## MINI IP(SCAPC)-SC/APC SM 5.0MM WATERPROOF PATCH CORD&PIGTAIL



# **Mini IP(SCAPC)-SC/APC SM 5.0mm Waterproof Patch cord&Pigtail** **Description**

OMC's Mini IP SC APC-SCAPC Patch cord 5.0mm Patch cord is assembled with a double jacket 5.0mm OD. It offers good tensile strength in installation. The Huawei connector end incorporates an SC/APC type connection within a slim, sealed, threaded polymer housing allowing easy connection to either a multi port terminal or in-line extension receptacle.

This cable is easily pluggable into the optical termination boxes, in a way that there is no need to open the closure to activate new subscribers. Mini SC patch cord provide a robust and sealed connection. So it have a very good waterproof characteristics. All of those features make it a best solution for fiber to the home (FTTH) connectivity.

## Patch cord's Optical Specifications



|                       |                         |                             |                    |
|-----------------------|-------------------------|-----------------------------|--------------------|
| Connector             | Mini IP SC –Standard SC | Polish                      | APC-APC            |
| Fiber Mode            | 9/125μm, G657A2         | Jacket Color                | Black              |
| Cable OD              | 5.0±0.2mm               | Wavelength                  | SM:1310/1550nm     |
| Cable Structure       | Simplex                 | Jacket Material             | LSZH               |
| Insertion loss        | ≤0.3dB(Super low loss)  | Return loss                 | SM APC ≥ 60dB(min) |
| Operation Temperature | -10 ~ +70°C             | Install&Storage temperature | -40 ~ +70°C        |

**Remark:**The IL in the table is only refer to the IL (connector). The product IL must contain the connector IL and fiber cable IL, IL all =2 x IL (connector) + IL (1km cable IL)/1000 x L (cable length).

## Mechanical and Environmental Characteristics

| Items                      | Unite  | Specifications | Reference      |
|----------------------------|--------|----------------|----------------|
| Span Length                | M      | 50             |                |
| Tension(Long Term)         | N      | 300            | IEC 61300-2-4  |
| Tension (Short Term)       | N      | 600            | IEC 61300-2-4  |
| Crush (Long Term)          | N/10cm | 300            | IEC 61300-2-5  |
| Crush (Short Term)         | N/10cm | 1000           | IEC 61300-2-5  |
| Min. Bend Radius (Dynamic) | mm     | 20D            |                |
| Min. Bend Radius (Static)  | mm     | 10D            |                |
| Operating Temperature      | °C     | -20~+60        | IEC 61300-2-22 |
| Storage Temperature        | °C     | -20~+60        | IEC 61300-2-22 |

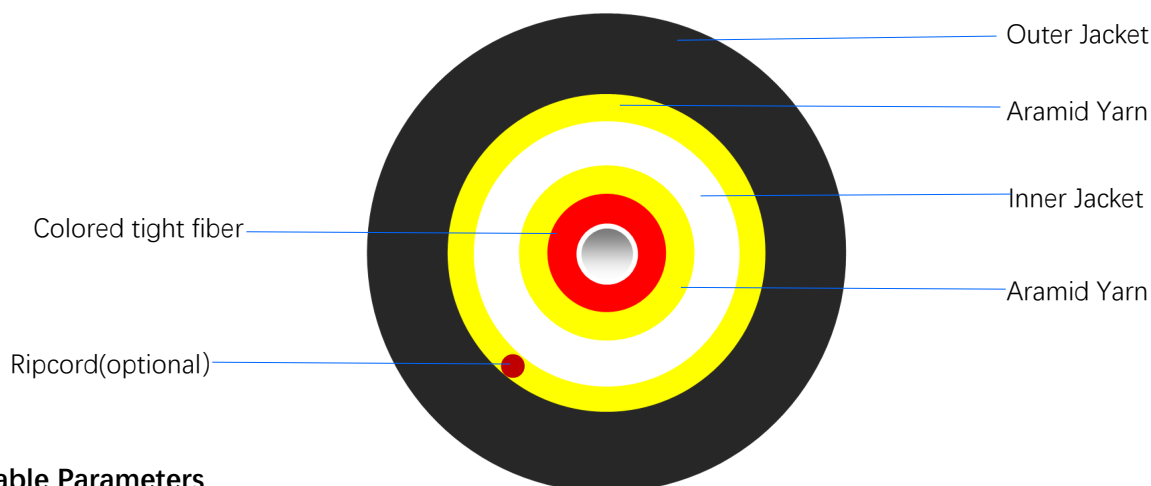
## End-Face Quality (SM)

| Zone               | Range (μm) | Scratches | Defects | Reference           |
|--------------------|------------|-----------|---------|---------------------|
| A: Core            | 0 to 25    | None      | None    | IEC 61300-3-35:2015 |
| B: Cladding        | 25 to 115  | None      | None    |                     |
| C: Adhesive        | 115 to 135 | None      | None    |                     |
| D: Contact         | 135 to 250 | None      | None    |                     |
| E: Rest of ferrule |            | None      | None    |                     |



## Mini IP(SCAPC)-SC/APC SM 5.0mm Waterproof Patch cord&Pigtail

### Cable Technical Data



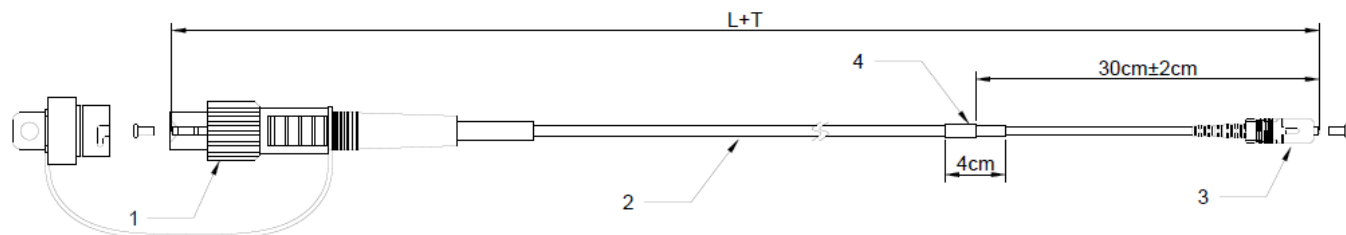
### Fiber Cable Parameters

| Items           |          | Parameters                                         |
|-----------------|----------|----------------------------------------------------|
| Fiber count     |          | 1F, 9/125μm, G657A2                                |
| Tight butter    | Diameter | 0.9±0.1mm                                          |
|                 | Color    | Red or Blue or white or green or Natural or others |
| Inner Jacket    | Diameter | 2.9mm±0.1mm or 2.0mm±0.1mm                         |
|                 | Material | LSZH                                               |
|                 | Color    | White&Black or Others                              |
| Strength Member |          | Aramid Yarn                                        |
| Outer Jacket    | Diameter | 5.0mm±0.2mm                                        |
|                 | Material | LSZH                                               |
|                 | Color    | Black                                              |

### Connector Optical Specifications

|                                                      |                                                                                                                 |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Type                                                 | Mini IP SC/APC                                                                                                  |
| Insertion loss                                       | Max. ≤ 0.3 dB                                                                                                   |
| Return loss                                          | ≥ 60 dB                                                                                                         |
| Tensile strength between optical cable and connector | Load: 300N Duration: 5s                                                                                         |
| Water proof                                          | IP67                                                                                                            |
| Fall                                                 | Drop height: 1.5 m<br>Number of drops: 5 for each plug<br>Test temperature: -15°C and 45°C                      |
| Bending                                              | Load: 45 N<br>Duration: 8 cycles, 10s/cycle                                                                     |
| Torsion                                              | Load: 15 N<br>Duration: 10 cycles ± 180°                                                                        |
| Static side load                                     | Load: 50 N for 1h                                                                                               |
| Water proof                                          | Depth: under 3m of water. Duration: 7 days                                                                      |
| Change of temperature                                | Temperature: -25°C to 70 °C<br>Duration at extreme temps: 1h<br>Temperature change speed: 1°C/min<br>Cycles: 12 |

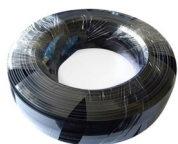
## Length Tolerance



| Overall Length(L) (m) | length of tolerance (cm) |
|-----------------------|--------------------------|
| 10<L<40               | +15/-0                   |
| 40<L                  | +0.5% x L/-0             |

## Packaging

This easily taken and well-protected fiber patch cable package has been labelled and marked by OMC as default . Which carton to be used depends on goods Qty . Packing can be customized.



1,PE Wrap



2,Paper Carton



3,Palletized

## Installation conditions

| Weather condition                           | Max. span(m) | Installation sag | Installation sag ratio (m) | Installation tensile (N) | Weather load tensile (N) | weather load sag(m) | weather load sag ratio |
|---------------------------------------------|--------------|------------------|----------------------------|--------------------------|--------------------------|---------------------|------------------------|
| Max. wind speed:<br>37 m/s<br>ice: 0        | 50           | 1.5%             | 0.5                        | 157                      | 773                      | 1.44                | 2.9%                   |
| Max. wind speed:<br>26.67 m/s<br>ice: 0     | 80           | 1.0%             | 1.125                      | 157                      | 713                      | 2.23                | 3.0%                   |
| Max. wind speed:<br>10.7 m/s<br>ice: 6.35mm | 70           | 1.4%             | 0.98                       | 157                      | 744                      | 2.09                | 3.0%                   |