

## Mini IP SC Specification

### Description

Mini IP SC connector is a small size high waterproof and dust-proof simplex connector, upto IP67.

It is made of the special materials with high density for high and low temperature resistant, acid and alkali resistant, UV resistant, and can match both round simplex FO cable 3.0mm-5.0mm and flat simplex drop cable.

### Connector Features & Benefits

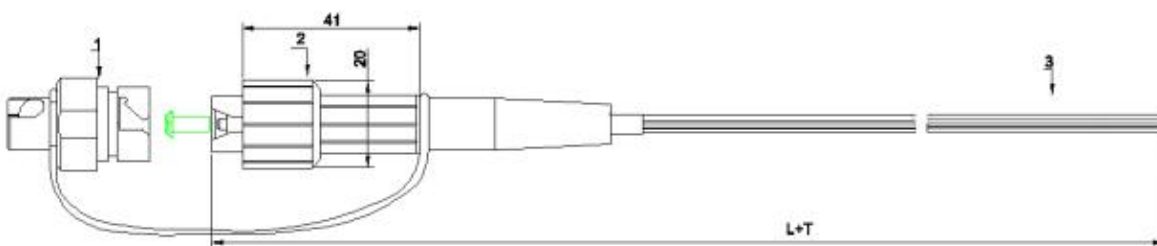
- Fast deployment, plug and play
- IP67 protection
- Anti-vibration design
- Ferrule protection and orientation design
- Easy to install and uninstall



### Application

- Outdoor harsh environment
- Wireless base station
- FTTx

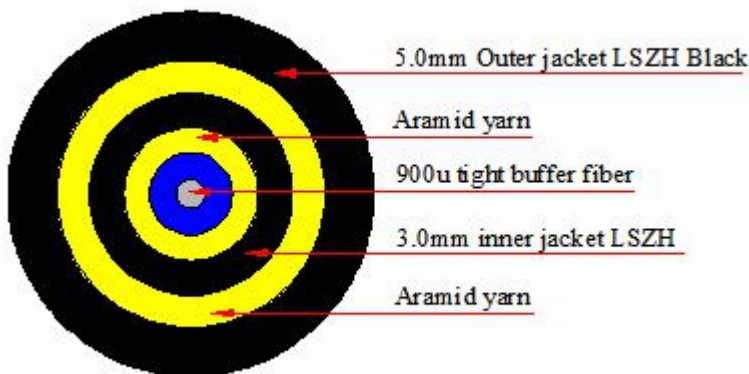
### Mini IP SC Connector



## Connector Test Specifications

| Item                     | Specifications   |        |
|--------------------------|--|--------|
| Type                     | SC/UPC   | SC/APC |
| Return Loss              | ≥50dB  | ≥60dB  |
| Insertion Loss           | $\leq 0.3 \text{ dB} + 0.36 \text{ dB/km} \cdot L(\text{km}) @ 1310\text{nm}$<br>$\leq 0.3 \text{ dB} + 0.25 \text{ dB/km} \cdot L(\text{km}) @ 1550\text{nm}$ |        |
| Endface                  | IEC 61300-3-35   |        |
| Durability(1000Mating)   | 0.2dB Max.increase   |        |
| Installation Temperature | -10℃ ~ +60℃  |        |
| Operating Temperature    | -25℃ ~ 70℃   |        |
| Storage Temperature      | -40℃ ~ 75℃   |        |
| Cable pull               | 90N  |        |

## Optical cable matching



| Items                        | Descriptions    |  |
|------------------------------|-----------------|--|
| Optical Fiber                | Fiber count     | 1  |
|                              | Color           | According to customer's request or our company's request |
| Suspension reinforced member | Material        | Rust steel wire& Rust steel strand                       |
| Sheath                       | Material        | HFFR   |
|                              | Color           | According to customer's request or our company's request |
|                              | Strength Member | Rust steel wire & Non-metallic strengthening member      |
|                              | Diameter        | 2.0(±0.2)*5.2(±0.2)mm                                    |
| weight ±5%KG/KM              |                 | 20   |

can match both round simplex FO cable 3.0mm-5.0mm and flat simplex drop cable.

## Optical Fiber Performance

### Single-mode

| Fiber type                   |         | G652D<br>(1310/1550nm)       | G657A1<br>(1310/1550nm)      | G657A2<br>(1310/1550nm)      | G657B3<br>(1310/1550nm)      |
|------------------------------|---------|------------------------------|------------------------------|------------------------------|------------------------------|
| Attenuation                  | Typical | 0.36/0.22                    | 0.36/0.22                    | 0.36/0.22                    | 0.36/0.22                    |
|                              | Maximum | 0.4/0.3                      | 0.4/0.3                      | 0.4/0.3                      | 0.4/0.3                      |
| Zero Dispersion Slope        |         | ≤0.091 ps/km·nm <sup>2</sup> | ≤0.092 ps/km·nm <sup>2</sup> | ≤0.092 ps/km·nm <sup>2</sup> | ≤0.092 ps/km·nm <sup>2</sup> |
| Dispersion(1285~1340nm)      |         | -3.5 – 3.5ps/(nm·km)         | -3.5 – 3.5ps/(nm·km)         | -3.5 – 3.5ps/(nm·km)         | -3.5 – 3.5ps/(nm·km)         |
| Mode field Diameter(@1310nm) |         | 9.1±0.4 μm                   | 8.8±0.4 μm                   | 8.8±0.4 μm                   | 8.6±0.4 μm                   |
| Cutoff wavelength cable(nm)  |         | ≤1260 nm                     | ≤1260 nm                     | ≤1260 nm                     | ≤1260 nm                     |
| Min bend radius(mm)          |         | 16 mm                        | 10 mm                        | 7.5 mm                       | 5 mm                         |
| Cladding diameter(μm)        |         | 125±1.0                      | 125±1.0                      | 125±1.0                      | 125±1.0                      |

### Multi-mode

| Fiber type                 |         | 62.5/125μm<br>(850/1300nm) | 50/125μm<br>(850/1300nm) | OM2+<br>(850/1300nm) | OM3<br>(850/1300nm) | OM4<br>(850/1300nm) | OM5<br>(850/953/1300nm)              |
|----------------------------|---------|----------------------------|--------------------------|----------------------|---------------------|---------------------|--------------------------------------|
| Attenuation                | Typical | 3.0/1.0                    | 3.0/1.0                  | 3.0/1.0              | 3.0/1.0             | 3.0/1.0             | 3.0/---/1.0                          |
|                            | Maximum | 3.5/1.5                    | 3.5/1.5                  | 3.5/1.5              | 3.5/1.5             | 3.5/1.5             | 3.5/---/1.5                          |
| Bandwidth(MHz·km)          |         | ≥200/≥500                  | ≥400/≥500                | ≥700/≥500            | ≥1500/≥500          | ≥3500/≥500          | ≥3500/≥1850/≥500                     |
| Effective modal bandwidth  |         | ----/----                  | ----/----                | ≥950                 | ≥2000/----          | ≥4700/----          | ≥4700/≥4700/----                     |
| 10 Gigabit Ethernet SX (M) |         | ----/----                  | ----/----                | ----/----            | ≤300/----           | ≤550/----           | 40GBASE-SR4/100GB ASE-SR10@850--200M |
| Min bend radius(mm)        |         | 16 mm                      | 10 mm                    | 7.5 mm               | 7.5 mm              | 7.5 mm              | 7.5 mm                               |
| Cladding diameter(μm)      |         | 125±1.0                    | 125±1.0                  | 125±1.0              | 125±1.0             | 125±1.0             | 125±1.0                              |

| Items             |         | Descriptions |             |
|-------------------|---------|--------------|-------------|
| Tensile Strength  |         | short-term   | 600-1200N   |
|                   |         | long-term    | 300-600N    |
| Crush Resistance  |         | short-term   | 1000N/100mm |
|                   |         | long-term    | 500N/100mm  |
| Temperature Range |         | -20℃ -+60℃   |             |
| Bending Radius    | Dynamic | ≥25D         |             |
|                   | Static  | ≥12.5D       |             |