

# Sales Catalog of HNK Telecommunication Products

## Fiber Optic Adaptor

### Fiber Optic Adaptor Series

Fiber Optic Adapters are an important component in a fiber optic network; they are used in a fiber optic patch panel or any other outlet to mate two connectors. Fiber Optic adapters are available for all standard connector types in both single mode and multimode including Simplex and duplex versions. Our fiber optic adapters are made with high precision machines which ensure precise alignment for the connectors when they are plugged in. Fiber Optic Adaptors are color coded allowing easy identification of the adaptor type.

We also offer hybrid and other special types of fiber optic adapters, such as Bare, shuttered and metal housing fiber optic adapters.



### Standards Compliance

TIA/EIA-568-C.3

TIA/EIA-604

RoHS, REACH SvHC compliant

### Features

- Made of high quality Zirconia ceramic sleeves
- 100% tested on optical performance (Insertion Loss & Return Loss)
- End-face geometry requirement complies to Telcordia GR-326-CORE
- For end-to-end fibre cable connectivity
- Available in singlemode and multimode, including APC and various colours
- Female to female & male to female adapters available
- Hybrid, Shuttered and Metal adapters available
- Coloured for easy identification

### Environmental & Mechanical Data

|                                  |                                                  |
|----------------------------------|--------------------------------------------------|
| Operating Temperature            | -40 to +75° C                                    |
| Storage Temperature:             | -40 to +85° C                                    |
| Temperature Cycling (61300-2-18) | -40 to +75° C, 40 cycles=0.2dB change            |
| High temperature (61300-2-18)    | 70°c for 96Hrs, <0.4dB change                    |
| Damp Heat (61300-2-19)           | 40° C at 93%RH for 96 Hrs, <0.4dB change         |
| Vibration-Mated Pair (61300-2-1) | 10-55Hz, 1.5mm P to P <0.2dB change              |
| Mating Durability (61300-2-2)    | 500 Mating Cycles, clean every 25, <0.2dB change |

### Optical Performance Data

| Item                                 | Single mode              |        |        | Multimode                |        |               |
|--------------------------------------|--------------------------|--------|--------|--------------------------|--------|---------------|
|                                      | PC                       | UPC    | APC    | 62.5/125                 | 50/125 | 50/125<br>10G |
| Insert Loss/connector (single Fiber) | 0.2dB Max. (0.15dB typ.) |        |        | 0.2dB Max. (0.15dB typ.) |        |               |
| Return Loss                          | ≥45 dB                   | ≥50 dB | ≥60 dB | N.A                      |        |               |
| Insert Loss/MTRJ Connector           | 0.5dB Max. (0.45dB typ.) |        |        | 0.5dB Max. (0.45dB typ.) |        |               |
| Pull Strength                        | ≥98N                     |        |        | ≥98N                     |        |               |

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## Fiber Optic Adaptor

### Ordering Information

Using the available configurations amend/create product codes using the formula below.

Part Number: XX-AA-(BB)-(CD)E(FG)CL

### Ordering Guide

|    |                                                |                                                                                                                                                              |
|----|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| XX | Adapter Type Code                              | AD, HAD, MAD                                                                                                                                                 |
| AA | Connector Type A<br>(Female or Male)           | FP,SP,SA,LP                                                                                                                                                  |
| BB | Connector Type B (Female)                      | FP,SP,SA,LP                                                                                                                                                  |
| C  | Mode                                           | SM=Singlemode<br>MM=Multimode<br>OM3=Multimode 10G                                                                                                           |
| D  | Fiber Type (only apply to<br>MAD Type Adapter) | OM1=62.5/125 OM1<br>OM2=50/125 OM2<br>SM=9/125 Singlemode                                                                                                    |
| E  | Fiber Count                                    | SX=Simplex, DX=Duplex,<br>QD=Quad                                                                                                                            |
| F  | Adapter Shape                                  | F= flange type, S =Square Type,<br>D=D type                                                                                                                  |
| G  | Material                                       | M=Metal, P=plastic                                                                                                                                           |
| CL | Color(CL)                                      | Blue for Singlemode PC Standard,<br>Beige for Multimode Standard,<br>Aqua for OM3/OM4 Standard and<br>Green for Singlemode APC.<br>(Metal Structure Unsited) |

### Adapter Type Code

|     |                                               |
|-----|-----------------------------------------------|
| AD  | Standard Adapter<br>(Female to Female Adapte) |
| HAD | Hybrid Adapter<br>(Female to Female Adapte)   |
| MAD | Male To Female Adapter                        |
| BAD | Bare Adapter                                  |
| SAD | Shuttered Adapter                             |

### Connector Type Code

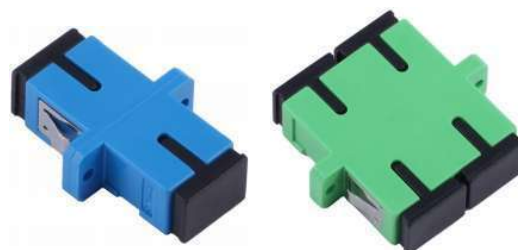
|    |               |    |        |
|----|---------------|----|--------|
| FP | FC/PC,FC/UPC  | FA | FC/APC |
| SP | SC/PC, SC/UPC | SA | SC/APC |
| TP | ST/PC, ST/UPC | TA | ST/APC |
| LP | LC/PC, LC/UPC | LA | LC/APC |
| MU | MU            | MT | MTRJ   |
| DN | DIN           | E2 | E2000  |

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### Fiber Optic Adaptor

#### SC Fiber Optic Adaptor

SC Fiber Optic Adaptors are various types including single mode and multimode, ceramic sleeve, Simplex and Duplex versions. Standard female to female SC Fiber optic adaptor and hybrid SC Fiber optic adaptors are available.



#### Design & Materials

|                                            |                                                    |
|--------------------------------------------|----------------------------------------------------|
| Adaptor material                           | High Impact flame retardant thermo plastic UL94-V0 |
| Split Sleeve Material                      | Zirconia ceramic                                   |
| Spring Plate                               | Stainless steel                                    |
| Capillary diameter tolerance (Single Mode) | 126 ± 0.5µm                                        |
| Capillary diameter tolerance (Multimode)   | 127± 0.5µm                                         |
| Operating Temperature                      | -40 to +75° C                                      |
| Storage Temperature:                       | -40 to +85° C                                      |
| Mating durability                          | >500 Mating Cycles                                 |

#### Ordering Sample

| Part Number           | Description                                                   |
|-----------------------|---------------------------------------------------------------|
| <b>AD-SP-OM3DXPAQ</b> | SC/PC Multimode OM3 Duplex Plastic Fiber Optic Adaptor, Aqua. |
| <b>AD-SA-SMSXPGR</b>  | SC/APC Singlemode Simplex Plastic Fiber Optic Adaptor, Green. |

#### SC Hybrid Fiber Optic Adaptor

SC hybrid fiber optic adaptors are with plastic or metal (Zinc alloy nickel plated) housing, flange type, ceramic sleeve. Hybrid adaptors are available in singlemode and multimode and many different configurations. They can be practically used in any application and connect different connector types.



#### Ordering Sample

| Part Number              | Description                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------|
| <b>HAD-SP-FP-SXM</b>     | SC/PC - FC/PC Simplex Metal Hybrid Fiber Optic Adaptor.                                 |
| <b>MAD-SP-LP-SMSXPBL</b> | SC/PC - LC/PC Singlemode Simplex Plastic Male To Female Type Fiber Optic Adaptor, Blue. |