



SKU: 81.SMFMMF-SCST-3M

Category:

# FlexSym Singlemode Fiber to Multimode Fiber Modal Adapting Jumper (SCST)

The Tellabs FlexSym® Singlemode Fiber to Multimode Fiber Modal Adapter 3-meters jumper cable enables cost-effective re-use of existing multimode fiber infrastructure inside buildings and across extended campuses – SMF SC/APC connector on OLT/splitter side and MMF ST/UPC connector on ONT side.

## Features

- Supports any length of SMF from the Tellabs OLT through the splitter up to the limit of the 28dB optical budget
- Allows re-use of multimode fiber cabling from the splitter location to where the ONTs are mounted (all Tellabs ONT models are supported)
- Economical one-to-one MMF cabling solution without stranding ports on passive optical splitters
- Eliminates the cost of installing new singlemode fiber in the horizontal pathways and the final access drops
- SMF SC/APC connector on OLT/splitter side and MMF ST/UPC connector on ONT side.
- Allows full rate PON service over multimode fiber cabling up to 550 meters
- Qualified for OM1, OM2, and OM3 multimode fiber cable types
- Completely passive operation, no power or maintenance required

## Highlights

### Smart

It is a mode adapting jumper cable that has Singlemode Fiber (SMF) connector to the passive optical splitter facing the Optical Line Terminal (OLT). This allows for the operation of 10G XGS-PON and 2.5G G-PON over Multimode Fiber (MMF) between the jumper and the Optical Network Terminals (ONT). The Tellabs FlexSym SMF-MMF Modal Adapter Cable has unique underlying technology that cancels modal dispersion association with MMF transmission.

### Stable

The Tellabs FlexSym SMF-MMF Modal Adapter patch cord can work in conjunction with 2:x passive optical splitter to provide industry leading fiber route diversity and geographically dispersed OLTs using FSAN-based Type-B PON redundancy. This redundancy provides for port-to-port, card-to-card, OLT-to-OLT and PON Path protection switching. Network redundancy is an optional architecture for when the highest level for resiliency is required.

### Scalable

The SMF-MMF Modal Adapter cable can scale enterprise LAN infrastructure regardless of SMF or MMF cabling. Existing MMF cabling can be repurposed to reach ONTs mounted in telecom rooms (intermediate distribution frames) within a building, and ONTs mounted in plenum space, above ceilings, below ceilings, in walls, in office cubicles or at desks, or even in main distribution frames in the main data centers of remote buildings – all Tellabs ONT models are supported.

### Savings

With the Tellabs FlexSym SMF-MMF Modal Adapter cable, installations gain all the benefits of a Passive Optical Network, while economically using MMF cabling solution without the need to replace the MMF with SMF cabling. Furthermore, the one-to-one MMF cabling solution saves costs by not stranding ports on passive optical splitters.

## Specifications

### Interfaces

- SMF SC/APC to MMF ST/UPC version

## Physical

- 3-meter jumper

## Environmental

- Relative Humidity: 5–85% noncondensing
- Temperature: -40° to +158° F (-40° to +70° C)

## Optical

- Optical Wavelengths: min 1250nm, max 1600
- Insertion Loss (measured with SMF patch cords on both input and output): 2.5 dB
- Power Variation (Depends on customer connector eccentricity and surface quality): min <2 dB, max 5 dB
- Input Fiber Type: SMF 9 um
- Output Fiber Type: MMF 50 um
- Input Optical Connector (Simplex, GR-326 compliant): SC/APC
- Output Optical Connector (Simplex): ST/UPC (or option for LC/UPC)
- Eccentricity (MMF ST/UPC connectors): 1.2 um
- Max reach over MMF (No intermediate patch panel): < 550 m for 1-2.5 Gb/s or 10 Gb/s

## Installations

- Jumper cable offers flexible mounting options
- Use Singlemode Fiber 3-meter Jumper (Part Number: 81.SCAPC-LCUPC-3M for 10-Pack) for connection at ONT

## Ordering Information

- Tellabs FlexSym SM SC/APC MM ST/UPC 3-Meter Jumper Part Number: 81.SMFMMF-SCST-3M
- Tellabs FlexSym Singlemode Fiber 3-meter Jumper 10-Pack Part Number: 81.SCAPC-LCUPC-3M

## General

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