



Product

Multi-core fibre fan-in and fan-out module is a module that has achieved the high-efficiency coupling between multi-core fibre and single-mode fibres while also fulfilling the channel space division multiplexing and demultiplexing function in the application of multi-core fibre.

Special technology and modularized encapsulation are adopted for the optical power coupling between multi-core fibre and single-mode fibres, with low insertion loss, low core crosstalk and high return loss. A complete communication and sensor system can be built using the multi-core fibre fan-in and fan-out module and the multi-core fibres of corresponding parameters, opening up a wide range of application possibilities.

Features

- Encapsulated in metal tube, customizable encapsulation size FC/PC, FC/APC or bare fibre jumper,
- Ultra low crosstalk
- · Low and consistent insertion loss

FC/PC, FC/APC or bare fibre jumper, customizable connector

Yangtze Optical Fibre and Cable Joint Stock Limited Company

- Specifications

Optical Properties	Range (Multi-core Fibre Fan-in & Fan-out Module (1 Pair))
Average Insertion Loss@1550 nm(dB)	≤ 2.0
Maximum Insertion Loss@1550 nm(dB)	≤ 3.0
Return Loss (dB)	≤ −45
Crosstalk Index (Adjacent core) (dB)	≤ −40
Geometrical Properties	
Multi-core Fibre Length (m)	300 ± 0.2
Length of Loose Tube of Multi-core Fibre	0.9
Length of Loose Tube of Multi-core Fibre on Both	Ends (cm) 50
Length of Single-mode Pigtail on Both Ends (m)	1 ± 0.1
Single-mode Pigtail Length (mm)	0.9
Length of Encapsulated Steel Tube (mm)	150 ± 1
Diameter of Encapsulated Steel Tube (mm)	4 ± 0.1
Coating	
Coating Material	Acrylic resin

Service Temperature (°C)	- 40 to + 70
Encapsulation	
Steel Tube Encapsulation (mm)	150*4
Single-core Interface Type	FC / APC
Multi-core Interface Type	LC / UPC

Application Example



8-core fibre fan-in & fan-out



7-core fibre fan-in & fan-out

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