

## 7-Core Fiber Fan-In/Fan-Out Device



### ● Product Description

Multi-core fiber fan-in/fan-out devices are key components for achieving efficient coupling between multi-core fibers and standard fibers. These products are manufactured using proprietary technologies with independent intellectual property rights and modular packaging. They feature low loss, low crosstalk, high return loss, and high reliability. Standard products as well as customized solutions are available. They are



suitable for applications in optical communication, optical interconnection, optical sensing, and other related fields.

- **Product features**

Low insertion loss, low inter-core crosstalk, high return loss ; Excellent channel consistency, high reliability, good environmental adaptability ; Supports multiple packaging formats and features easy-to-use interfaces ; Supports customized services such as low loss and small core pitch

- **Part Number**

MP-IP-MPD07001A

- **Application area**

Data center optical modules、 Long-haul optical transmission、 Medical and shape sensing

- **Core parameters**

Type Description	Multi-core Fiber Length	Single-mode Pigtail Length
7-core FIFO	2.5 ± 0.2m	50 ± 5cm

## ● General Parameters

### Parameters

Product Name	Multi-core Fiber Fan-In/Fan-Out Device (Weakly Coupled Type)				
	2-core	4-core	5-core	7-core	19-core
Type Description	FIFO	FIFO	FIFO	FIFO	FIFO
Typical Insertion Loss (dB) @1550 nm	≤0.3	≤0.5	≤0.6	≤0.8	≤2.0
Maximum Insertion Loss (dB) @1550 nm	≤0.5	≤0.6	≤0.8	≤1.0	≤3.0
Return Loss (dB)	≥45				
Channel Crosstalk (dB)	≤-45				
Multi-core Fiber Length (m)	2.5 ± 0.2				
Single-mode Pigtail Length (cm)	50 ± 5				
Package Dimensions (mm)	Steel Tube: Φ5.5×50, Φ5.5×65, Φ5.5×100, Φ3.0 ×30				
	Metal Box: 65×12×9, 120×75×10				

<b>Operating Temperature</b>  (°C)	<b>-40 ~ +70</b>
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Product Name	Multi-core Fiber Fan-In/Fan-Out Device (Strongly Coupled Type)			
Type Description	2-core FIFO	4-core FIFO	7-core FIFO	12-core FIFO
<b>Typical Insertion Loss (dB)</b>  @1550 nm	≤0.6	≤1.0	≤1.2	≤1.8
<b>Maximum Insertion Loss</b>  (dB) @1550 nm	≤0.8	≤1.2	≤1.5	≤2.0
<b>Return Loss (dB)</b>	≥45			
<b>Multi-core Fiber Length (m)</b>	2.5 ± 0.2			
<b>Single-mode Pigtail Length</b>  (cm)	50 ± 5			
<b>Package Dimensions (mm)</b>	Steel Tube: Φ5.5×50, Φ5.5×65, Φ5.5×100, Φ 3.0×30  Metal Box: 65×12×9, 120×75×10			
<b>Operating Temperature (°C)</b>	-40 ~ +70			



**Note: For more product models and specification parameters, please feel free to contact us by phone. Custom development is supported.**