

Multimode Fiber Optic Coupler

This multimode fiber optic coupler is made with multimode fibers with core diameters of 50um, 62.5um, or 100um. The coupler is commonly used in short distance communications with LED sources operating at 1310nm or 850nm.



Overview

Precision Multimode Fiber Optic Couplers

These multimode fiber optic couplers are engineered for reliable signal splitting and combining across high-performance optical networks. Featuring a rugged, durable package, they offer excellent environmental and mechanical stability, ensuring consistent signal integrity. Designed for versatility, they support various configurations including standard 1x2, 1x3, 1x4, and complex tree/star architectures for demanding telecommunications and data applications.

Key Features

Typical Applications

- Long-haul Telecommunications
- Digital, Hybrid and AM-Video Systems
- CATV Systems
- High Speed Local Area Networks

Key Features

Low Excess Loss, Uniform Power Splitting, Rugged Package, Excellent Stability

Technical Specifications

Standard Coupler Performance (1x2 / 2x2)

Parameter	Grade A	Grade B
Excess Loss (Typical) (dB)	0.4	0.7
Max. Insertion Loss (dB)	3.7	4.0
Uniformity (Max.) (dB)	0.6	0.8

1x3 & 1x4 Fusion Coupler Performance

Configuration	Max. Insertion Loss (dB)	Uniformity (Max.) (dB)
1x3	6.0	1.2
1x4	7.2	1.2

Operating Wavelength: 600-1600 nm

Directivity (Min.): 35 dB

Physical Properties

Compatible Fiber Types	50/125, 62.5/125, 100/140
Fiber Pigtail Length	1m (custom lengths available)
Operating Temperature Range	-40°C to +85°C