Fiber Optic PBT Coupler

Fiber Optic PBT Coupler

Variants

1*2- 90:10 1*2- 50:50 1*2 - 30:70 1*2 - 20:80 1*2 - 95:5 1*2 - 25:75 1*2 - 35:65 1*2 - 15:85 1*2 - 40:60 1*2 55:45

Details

The **Optical Coupler 1×N Without Connector** is a premium passive fiber optic splitter designed for stable optical signal distribution in **FTTH, FTTx, GPON, EPON, telecom, CATV, ISP, and optical communication networks**. It delivers excellent optical performance with low insertion loss, high return loss, and outstanding environmental stability.

Available in multiple custom split ratios, this coupler provides flexible network design options for signal monitoring, optical distribution, and passive optical network (PON) deployments. The connector-free design allows users to terminate the fiber according to project requirements.

Fiber Type

Single Mode

Configuration

1 × N

Connector

Without Connector

Wavelength

1260–1650nm

Key Features

? Passive Optical Signal Splitter

? Available in Multiple Custom Split Ratios

? Low Insertion Loss & Low PDL

? Excellent Signal Uniformity

? Wide Operating Wavelength (1260–1650nm)

? High Return Loss & Directivity

? Steel Tube or ABS Package Available

? High Mechanical & Environmental Stability

Technical Specifications

Category	Specification
Product Type	Fiber Optic Coupler / Splitter
Configuration	1 × N
Split Ratio	Custom (Various Options Available)
Fiber Type	Single Mode (SMF-28e or Equivalent)
Operating Wavelength	1260–1650 nm (1310 / 1550 nm)
Insertion Loss (50:50)	? 3.4 dB
Loss Uniformity	? 0.8 dB
Return Loss	? 55 dB
PDL	? 0.15 dB
Directivity	? 55 dB
Connector Type	Without Connector
Package Type	Steel Tube / ABS Box
Dimensions	90 × 20 × 10 mm
Tube Size	Ø3.0 × 50 mm
Operating Temperature	-40°C to +85°C
Stability	High Environmental & Mechanical Stability

Available Split Ratios

Split Ratio	Power Distribution	Typical Application
99 : 1	99% / 1%	Signal Monitoring
98 : 2	98% / 2%	Network Monitoring
95 : 5	95% / 5%	Optical Monitoring
90 : 10	90% / 10%	PON Networks
80 : 20	80% / 20%	Signal Distribution
75 : 25	75% / 25%	Optical Networks
70 : 30	70% / 30%	Fiber Distribution
60 : 40	60% / 40%	Customized Networks
55 : 45	55% / 45%	Balanced Distribution
50 : 50	Equal Split	Optical Testing & Distribution

Applications

- FTTH & FTTx Networks
- GPON / EPON Systems
- CATV Networks
- ISP Infrastructure
- Optical Signal Monitoring

Telecommunication Networks

Laboratory & Testing Systems

Fiber Distribution Cabinets

Note:

Please select the required **split ratio**, **package type (Steel Tube or ABS Box)**, and fiber specifications according to your optical network design and signal distribution requirements.