Double-Clad Fiber Coupler 680nm to 980nm

(efficient collecting back reflection lights)

Product Description

Agiltron's double-clad 2x2 fiber coupler combines a double-clad fiber (single mode core surrounded by a multimode inner cladding) with a large core multimode fiber. Light in the single mode core of the double-clad fiber (DCF) is guided through the coupler with little loss (≤0.5 dB). Light in the multimode inner cladding of the DCF is transferred to the output multimode fiber with ≥60% transmission.

Features

- Single Mode Core Guide
- Multimode Reflection Guide
- Low Loss Transmission
- High Efficient Collection
- Versatile

Performance Specifications

Double Cladding Fiber Coupler	Min	Typical	Max	Unit
Operation Wavelength	680	780	980	nm
Single Mode Core Insertion Loss [1]		0.3	0.6	dB
Multimode Cladding Transfer [2]		60	70	%
Optical Power Handling			100	mW
Core Diameter (NA=0.12)		4.1		μm
Inner Cladding Diameter (NA=0.19)		26		μm
Collection Fiber Diameter (NA=0.22)		200		μm
Operating Temperature	-40		70	°C
Storage Temperature	-40		85	°C
Package Dimension		Ø 3.2 x 85		mm

Note:

1. Exclude connectors and fiber loss, the loss may degrade over time due to shortwave radiation
2. Port 2 to 3. Exclude connectors and the water absorption region around 1383 nm

Applications

- LiDAR
- OCT
- Fluorescence Imagine
- Confocal Microscopy
- Endoscopy

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www.agiltron.com

Ordering Information

DCFC	☐	2	4 2	☐	☐	☐	☐	☐
	Center Wavelength	Collect Fiber	Double Cladding	Pigtail Style	Fiber Length	Connector Input	Connector Output	Connector Signal
	1030=1 1310=3 780=7 530=5 Special=0	200 μm NA=0.22 Special =00	Core=4.1 μm, NA=0.12 Cladding=26 μm, NA=0.19 Special =00	900um Jacket=2 Special=0	0.25M=1 0.5M=2 1.0M=3 Special=0	None=1 FC/PC=2 FC/APC=3	None=1 FC/PC=2 FC/APC=3 SMA =4	None=1 FC/PC=2 FC/APC=3 SMA =4

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