

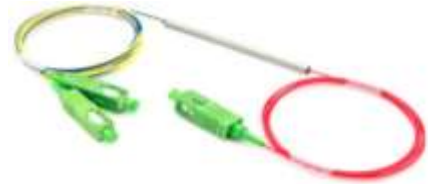
# Double-Clad Fiber Coupler

## 1250nm to 1550nm

(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 ( $\leq 0.5$  dB). Light in the multimode inner cladding of the DCF is transferred to the output multimode fiber with  $\geq 60\%$  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	1250	1300	1550	nm
Single Mode Core Insertion Loss <sup>1</sup>		0.3	0.6	dB
Multimode Cladding Transfer <sup>2</sup>		60	70	%
Optical Power Handling		300	1000	mW
Core Diameter (NA=0.12)		9		$\mu\text{m}$
Inner Cladding Diameter (NA=0.2)		105		$\mu\text{m}$
Collection Fiber Diameter (NA=0.22)		200		$\mu\text{m}$
Operating Temperature	-40		70	$^{\circ}\text{C}$
Storage Temperature	-40		85	$^{\circ}\text{C}$
Package Dimension		$\varnothing 3.2 \times 85$		mm

Note:

1. Exclude connectors and fiber loss
2. Port 2 to 3. Exclude connectors and the water absorption region around 1383 nm

### Applications

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

## Ordering Information

DCFC	<input type="checkbox"/>	2	91	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 $\mu$ m NA=0.22 Special =00	Core=9 $\mu$ m, NA=0.12 Cladding=105 $\mu$ m, NA=0.2 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	