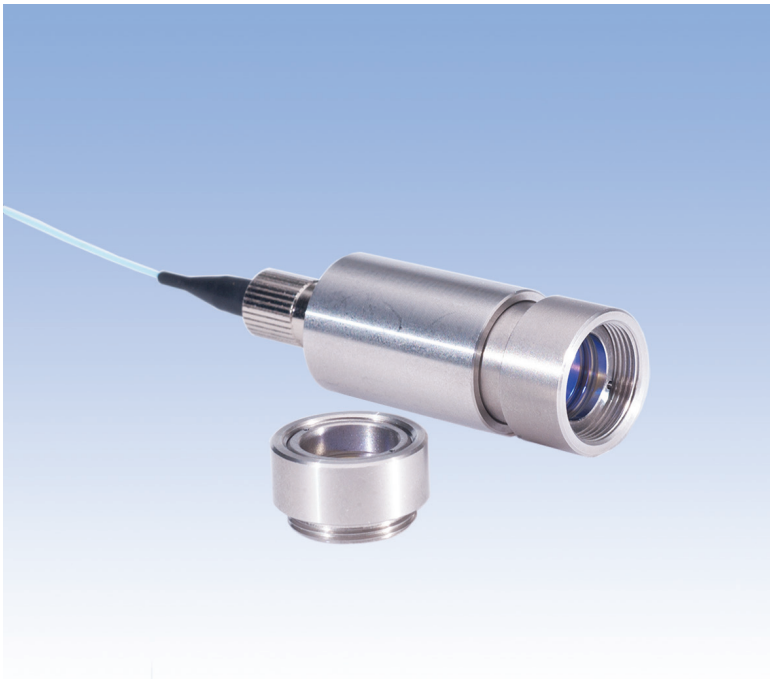


Fiber Focusers

with Diffraction Limited Spots



Features

- Air spaced design
- Low wavefront error
- No epoxy in the optical path
- Long working distance
- Precision aligned optics
- Various focusing cells
- FC or FC/APC
- Stainless steel housing

Applications

- Probing hazardous environments
- Probing camera array pixels
- Confocal instrumentation
- Flow cytometry
- Genetic sequencing
- Particle analyzers
- Micro array scanners
- Direct write systems
- Materials processing and analysis

The Fiber Focuser is designed to generate micron spot sizes at long working distance. It is a multi-element air spaced design that is optimized to work with singlemode type fibers.

The Fiber Focuser consists of a Fiber Collimator and a Focusing Cell that when combined, provides diffraction limited spot sizes at long distances. Focusing Cells screw onto the main collimator to provide a convenient, self aligned way to define your focused spot.

The Fiber Focuser provides a very cost effective solution, especially in the near UV and NIR regions. It also provides high transmission throughput and eliminates additional optics holders and alignment labor in your instrument. All optical materials are chosen to eliminate or minimize any fluorescence generated by some optics when used by lasers, especially in the UV or visible region.

An all stainless steel housing construction minimizes any temperature effects. The Fiber Focuser is available with an FC or FC/APC receptacle as standard.

Custom Fiber Focusers can be designed to include other optics such as polarizers, beam splitters or other optical devices. Options include mounting requirements, special wavelength ranges and environmental concerns. Fiber coupled lasers can also be supplied for a complete system

We design, manufacture and assemble all parts in-house to give you the right focuser or optical system for the job.

Fiber Focusers

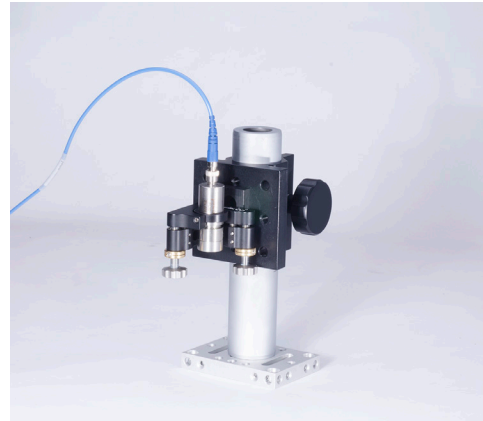
Specifications

FC10 Fiber Collimator	
Wavelength:	350 nm to 1700 nm
Aperture:	11.9 mm
Housing material:	Stainless steel
Receptacle:	FC or FC/APC

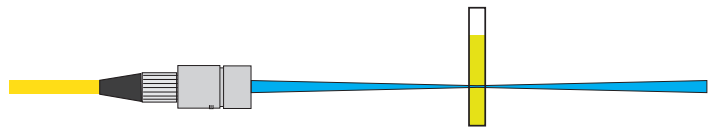
Ordering Information

The Fiber Focuser consist of a Fiber Collimator and a Focusing Cell.

Part 1: Collimator	
FC10-VIS1-FC	Usable from 350 - 640 nm
FC10-NIR1-FC	Usable from 600 - 1000 nm
FC10-NIR2-FC	Usable from 1000 - 1700 nm
FC10-VIS1-APC	Usable from 350 - 640 nm
FC10-NIR1-APC	Usable from 600 - 1000 nm
FC10-NIR2-APC	Usable from 1000 - 1700 nm



FC10 with FL10 mounted in ring mount and installed on an optical mount.



Small fiber collimator with long depth of focus.
~ 90 μm at 100 mm distance.

Part 2: Focusing Cell						
Model #			Focal length (mm)	Spot size (singlemode fiber)	Spot size (multimode fiber, 50 μm / 100 μm)	Working distance (mm)
		11	11	~1/2 core size	-	12
	VIS1 -	32	32	~ core size	~50 μm / ~100 μm	25
FL10 -	NIR1 -	50	50.2	~8 μm	~78 μm / ~156 μm	43
	NIR2 -	100	100	~16 μm	~156 μm / ~312 μm	93
		150	150	~23 μm	~234 μm / ~469 μm	143

Example of Focusing Cell model number: FL10-NIR1-50

One Fiber Collimator and one Focusing Cell must be ordered to make a Fiber Focuser.

Please call or email for desired spot size or distance to spot. We have many sizes of Fiber Collimators where it can be focused to produce many sizes of spots. For other optics such as polarizers or line generators, please call or email.

All Fiber Collimators and Focusing Cells are manufactured in our facility in California, USA

Specifications subject to change without notice.