

# Multimode Fiber Receiver/Collector



## *Features*

- **Designed for multimode fibers**
- **Two wavelength regions cover 400nm to 1550nm**
- **10mm aperture size**
- **Front aperture can accept 1/2 inch optics**
- **Adjustable focus**
- **Standard SMA receptacle**
- **Also works very well as an output collimator**

The FR10 Fiber Receiver was designed specifically to collect fairly collimated light and inject it into a 100 $\mu$ m or larger core fiber with greater than 90% efficiency.

This fiber receiver works much better than using a standard fiber collimator backwards. The results are a larger signal. Since most fiber collimators in the market are fixed at one wavelength using a simple optic, they end up doing a terrible job at collecting light from multiple wavelengths and injecting it into a fiber.

The FR10 Fiber Receiver is housed in stainless steel for ruggedness with an SMA receptacle. Focus is preset at the factory for collimated light. For the times when light is not as collimated as one would like, the focus can be adjusted by the user for optimal signal strength.

A nice feature is the internal threads at the aperture so that

1/2 inch optics, such as filters can be mounted. An additional optic cell can be used for convenience of mounting such optics and screwing onto the receiver.

Accessories available are a ring adapter for mounting to common optical mounts and optical fiber assemblies.

Applications include gathering light for sensors, detectors, and spectrometers.

The Fiber Receiver also works well as a fiber collimator for broadband light.

# Multimode Fiber Receiver/Collector

## Specifications

	VBB (visible)	NIR
Wavelength range:	400 nm to 700 nm	750 nm to 1550 nm
Aperture size:	10 mm	
Focus:	Adjustable	
Lockdown:	yes	
Body material:	Stainless steel	
Receiving fiber core size:	50 $\mu\text{m}$ or larger	100 $\mu\text{m}$ or larger
Receiving fiber NA:	0.22 or smaller	
Receptacle:	SMA or FC	

Factory setting works very well with fairly collimated light. For slightly diverging or converging light, the focus can be adjusted.

## Ordering Information

Model #	Description
FR10-VBB-SMA	Fiber receiver for all wavelengths from 400-700 nm
FR10-NIR-SMA	Fiber receiver for all wavelengths from 750-1550 nm
FR10-VBB-FC	Fiber receiver for all wavelengths from 400-700 nm
FR10-NIR-FC	Fiber receiver for all wavelengths from 750-1550 nm
FC10R-1.0	Ring adapter to mount FR10 onto 1 inch optical mounts
FM-C100UV3C-001	100 $\mu\text{m}$ step index fiber, 3 mm jacket with SMA connectors
FM-C200UV3C-001	200 $\mu\text{m}$ step index fiber, 3 mm jacket with SMA connectors
FM-A100UV3A-001	100 $\mu\text{m}$ step index fiber, 3 mm jacket with FC connectors
FM-A200UV3A-001	200 $\mu\text{m}$ step index fiber, 3 mm jacket with FC connectors

For OEM users we can fix a permanent fiber to the receiver, or install any filters or optical devices.

All products are manufactured in California, USA.



FR10 with ring mount mounted in a common one inch mirror mount.

Specifications subject to change without notice.