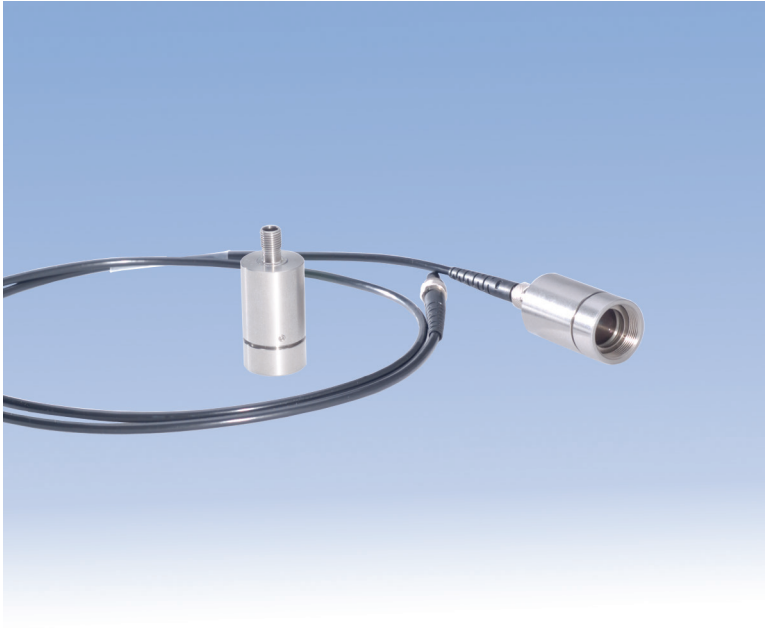


# Multimode Fiber Receiver/Collector



## *Features*

- **Designed for multimode fibers**
- **Collects all wavelengths and injects it into 100  $\mu\text{m}$  or larger core fiber with >90% efficiency**
- **Two regions: 400 nm to 700 nm  
600 nm to 1000 nm**
- **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 $\mu\text{m}$  or larger core fiber with greater than 90% efficiency.

This fiber receiver works much better than using a 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 and sensors 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

	Visible	NIR1
Wavelength range:	400 nm to 700 nm	600 nm to 1000 nm
Aperture size:	10 mm	
Focus:	Adjustable	
Lockdown:	yes	
Body material:	Stainless steel	
Receiving fiber core size:	50 $\mu$ m or larger	100 $\mu$ m or larger
Receiving fiber NA:	0.22	
Receptacle:	SMA (FC optional)	

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-NIR1-SMA	Fiber receiver for all wavelengths from 600nm to 1000nm
FC10R-1.0	Adapter to mount FR10 into 1 inch optical mounts
FM-C100UV3C-001	100 $\mu$ m step index fiber with SMA connectors
FM-C200UV3C-001	200 $\mu$ m step index fiber with SMA connectors

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

Specifications subject to change without notice.