Multimode Fiber Receiver/Collector



Features

- Designed for multimode fibers
- Collects all wavelengths from 400nm to 700nm and injects it into 100μm or larger core fiber with >90% efficiency
- 10mm aperture size
- Front aperture can accept 1/2 inch optics
- Adjustable focus
- Standard SMA receptacle

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 fiber collimator backwards. The results are a larger signal. Also most fiber collimators in the market are fixed at one wavelength and so do 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. But if you are working at the lower end or upper end of the spectrum, focus can be adjusted for better coupling. 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 cell can be used for convenience of mounting such optics.

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.

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Specifications

Wavelength range:	400-700 nm
Aperture size:	10 mm
Focus:	Adjustable
Lockdown:	yes
Body material:	Stainless steel
Receiving fiber core size:	50 μm or larger
Receiving fiber NA:	0.22
Receptacle:	SMA

Works very well with fairly collimated light at all wavelengths from 400-700nm as set at the factory. 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
FL10	Cell for 1/2 inch optics
FC10R-1.0	Adapter to mount FR10 into 1 inch optical mounts
FM-C100UV3C-001	100μm step index fiber with SMA connectors
FM-C200UV3C-001	200μm 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 or design for a different wavelength range.



FL10 Cell for installing optical devices.

Specifications subject to change without notice.