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## Стандартные волоконные коллиматоры New! FC3 & FC7 Fiber Collimators



### Features

- 350nm to 2300nm
- Low wavefront error
- No epoxy in the optical path
- Adjustable focus/ collimation
- Adjust for endcaps
- Tune to your wavelength
- Receptacle or pigtailed
- Stocked for quick delivery

We manufacture High Performance Fiber Collimators that are designed to give highly collimated beams with high transmission and low transmitted wavefront error. Our unique multi element design ensures you get a clean Gaussian beams with no diffraction effects at any distance.

Our adjustable focus collimators can replace 3 or 4 fixed wavelength collimators. You can optimize collimation to your operating wavelength and lock it down. Besides collimating the beam you can also diverge the beam for illumination or focus the beam to micron size spots at some distance. This is ideal for sensors, chemical and biological threat detection. Our choice of materials minimizes any fluorescence effects caused by other fiber collimators and minimizes some temperature effects. Having excellent optical design minimizes your laser power requirements and gives you much higher signal strength.

We offer various aperture sizes from 1.6mm to 100mm to generate various beam sizes. All collimators have an FC or FC/APC receptacle as standard with SMA as an option. The smaller collimators have fine 80 pitch threads for fine focus/collimation adjustment. The larger collimators have focus adjustment with no rotation. Four wavelength regions cover the spectrum from 350nm to 2300nm. All optics have a broadband AR coating. For use in the UV, high power applications and radiation environments, see our all fused silica Fiber Collimators. See the "Related Products" section to the right for more Fiber Collimators.

### Customization

For OEM users we have pigtailed collimators for a specific wavelength. We can customize for wavelength regions, beam sizes, housing requirements or environmental conditions such as space, vacuum, radiation or magnetic. We design and manufacture our own optics, fibers assemblies and housing giving us full control of the manufacturing process.

### Specifications

Parameter	NEW! FC3	FC5	NEW! FC7	FC10	FC20
Beam size*:	1 mm	2.1 mm	3 mm	5.5 mm	11 mm
Aperture:	3.5 mm	6.5 mm	7 mm	11.9 mm	23.5 mm
Beam divergence:	<1 mrad	<0.5 mrad	<0.37 mrad	<0.25 mrad	<0.12 mrad
Wavefront error (rms):	<1/10 wave	<1/10 wave	<1/10 wave	<1/10 wave	<1/10 wave
Collimation / Focus	Adjustable (80 tpi)	Adjustable (80 tpi)	Adjustable (80 tpi)	Adjustable (80 tpi)	Adjustable
Locking:	yes	yes	yes	yes	yes
Receptacle**:	FC or FC/APC	FC or FC/APC	FC or FC/APC	FC or FC/APC	FC or FC/APC
Material:	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Weight:	12 g (0.4 oz.)	45 g (1.6 oz.)	28 g (1 oz)	85 g (3.0 oz.)	286 g (10.1 oz.)

\* Beam size is measured at 1/e<sup>2</sup> points at 635nm using fiber with NA=0.13. Beam size may vary due to wavelength, NA of fiber and other tolerances of the assembly.

\*\* Options for SMA receptacle or pigtailed version.

For Larger Fiber Collimators go to "Large Fiber Collimators" to see FC40, FC45 and FC100.

We cover the span from 240 nm to 2300 nm with four coating regions:

- VIS! for wavelengths from 375 nm to 640 nm
- NIR1 for wavelengths from 600 nm to 1000 nm
- NIR2 for wavelengths from 1000 nm to 1700 nm
- SWIR for wavelengths from 1500 nm to 2300 nm

We also have versions for the UV region and Mid IR region. Go to [Fiber Collimator Overview](#) to see more options.

Example of a part number is as follows:

**FC10**                    **- NIR1**                    **- APC**

Collimator size        Wavelength region    Connector type

Accessories include Mounting Adaptors and various Optical Fibers.

Mounting Adaptors	
FC5R-1.0	FC3 and FC5 Ring adapter for 1 inch optical mounts
FC7R-1.0	FC7 Ring adapter for 1 inch optical mounts.
FC10R-1.0	FC10 Ring adapter for 1 inch optical mounts.
FC20R-2.0	FC20 Ring adapter for 2 inch optical mounts.



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