

FC100

Large Fiber Collimator

Preliminary !



Features

- Usable from 350nm to 2300nm
- ~100 mm aperture
- Adjustable focus
- No epoxy in the optical path
- No fluorescence
- Low wavefront error
- Usable with Singlemode or PM fibers
- FC or FC/APC receptacle

Applications

- Free space communications
- Lidar
- Remote sensing
- Metrology

For those wanting BIG BEAMS, we have our High Performance FC100 Large Fiber Collimators. It's multi-element design gives a highly collimated, Gaussian beam with low wavefront error.

All optics are AR coated to give high transmission. Four wavelength bands cover the range from 350nm to 2300nm. To accommodate all the different wavelengths that are now available, the focus is adjustable providing linear motion and no rotation of the optics. Once you have adjusted for your wavelength you can lock it down. There is a second lock down mechanism for use against vibrations. Back end has an FC or FC/APC receptacle.

A sturdy mount has threaded holes to mount the fiber collimator to stages, tables and tripods.

Application include free space communications, lidar, metrology and remote sensing.



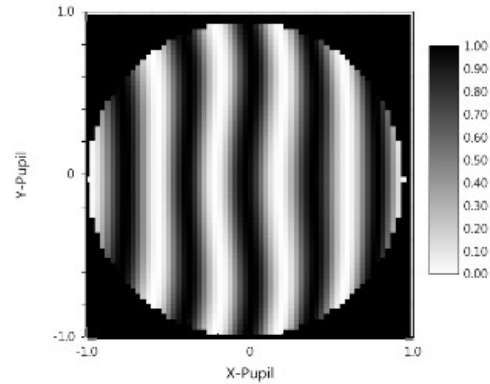
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FC100 Large Fiber Collimator

Specifications

Mechanical aperture:	97.8 mm
Beam size at $1/e^2$ points:	50 mm
Beam divergence:	<0.025 mrad
Wavefront error, over $1/e^2$ points rms:	<1/4 wave at 633 nm
Receptacle:	FC or FC/APC
Collimation:	Adjustable with no rotation
Locking:	yes

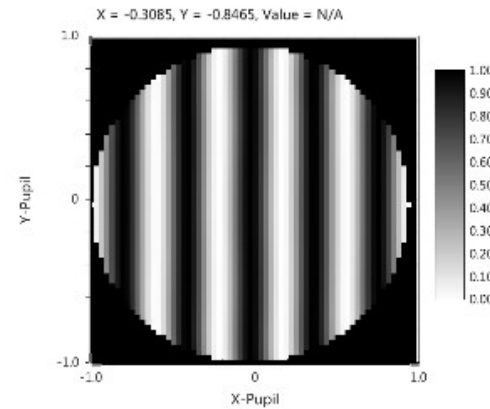
Wavefront error expected at 640 nm is 1/4 wave p-v over central 50% of aperture. Measured was 1/4 wave.



Ordering Information

Model #	Description
FC100-NIR2-FC	100mm aperture, FC receptacle
FC100-NIR2-APC	100mm aperture, FC/APC receptacle
MT4.5SS	FC100 mount for use on tables, stages or tripods.

Expected wavefront error at 1550nm is 1/10 wave over the central 50% of aperture.



NIR2 covers $\lambda = 1000\text{nm}$ to 1700nm

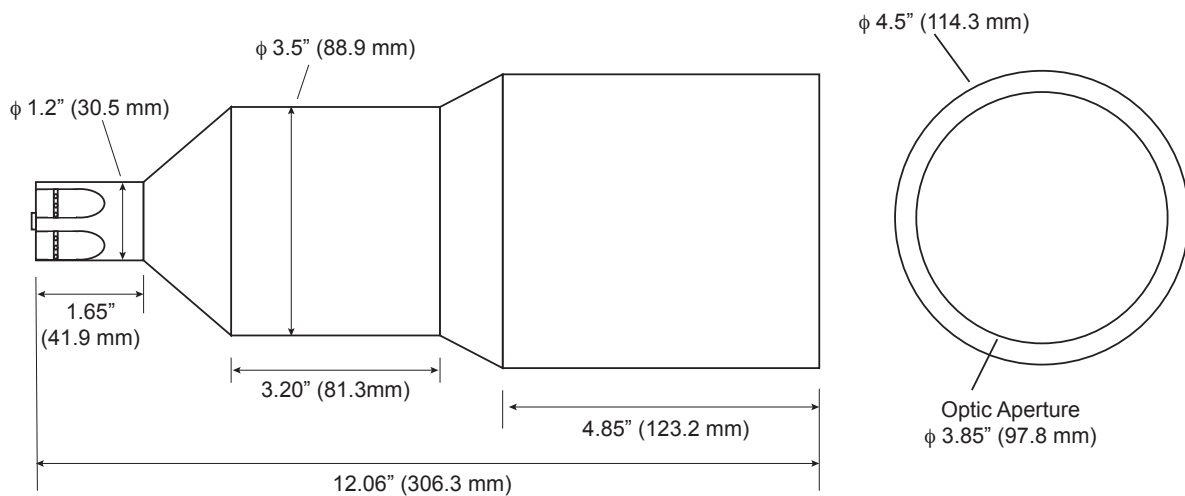
Other wavelength range available on a semi-custom basis are:

Use -VIS1 for $\lambda = 350\text{nm}$ to 640nm

Use -NIR1 for $\lambda = 600\text{nm}$ to 1000nm

Use -SWIR for $\lambda = 1500\text{nm}$ to 2300nm

Dimensions



Specifications subject to change without notice.



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