

# LOW INDEX DOUBLE CLAD PASSIVE FIBER



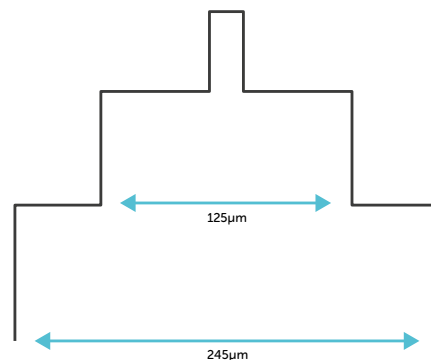
Double clad passive fibers are available for 1060nm and 1550nm fiber laser, pump combiner, amplifier and sensor applications.

The DC1060(20/400)0.065HD fiber is available with a low numerical aperture of 0.065 and a 20 $\mu$ m core diameter to give significant benefits in power handling capabilities and high non-linear thresholds for 1060nm fiber laser applications.

The 1550nm DC1500(6/125)0.21HD and DC1500(11/125)0.12HD are optimized for splice compatibility to Fibercore's erbium/ytterbium doped amplifier fibers to allow superior efficiency high power amplifiers.

The DCSC(135/155/320)LI fiber has a 135 $\mu$ m diameter pure silica core and NA of nominally 0.22, suitable for high power pump transmission.

These fibers use a low index polymer coating material that has been successfully qualified for mechanical reliability and attenuation against the Telcordia 85°C/85% humidity test.



## FEATURES

### Advantages

- High power handling capability
- 1060nm and 1550nm variants
- Splice compatible with Fibercore doped fibers
- Range of core NAs available

### Typical Applications:

- High power amplifiers
- Fiber lasers
- LiDAR
- Biomedical probes
- Beam delivery
- Pump combiners

### Product Variants

- DC1060(20/400)0.065HD  
Double clad fiber with a 20 $\mu$ m core diameter and 0.08 NA for use around 1060nm
- DC1500(11/125)0.12HD  
Double clad fiber with an 11 $\mu$ m MFD and 0.12 NA for use around 1550nm
- DC1500(6/125)0.21HD  
Double clad fiber with a 6 $\mu$ m MFD and 0.21 NA for use around 1550nm
- DCSC(135/155/320)LI  
Double clad, pure silica core, low index fiber

To find out more visit [fibercore.com](https://www.fibercore.com)

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## SPECIFICATIONS

	DC1060 (20/400)0.065HD	DC1500 (11/125)0.12HD	DC1500 (6/125)0.21HD	DCSC (135/155/320)LI
<b>Single-Mode Core</b>				
Mode Field Diameter (µm)	-	9.5 - 11.5@1550nm	5.6 - 6.5@1550nm	-
Core Numerical Aperture	0.06 - 0.07	0.11 - 0.13	0.20 - 0.22	0.21 - 0.23
Cut-Off Wavelength (nm)	-	1360 - 1520	1290 - 1520	-
Core Attenuation (dB/km)	≤8 @1200nm	≤1 @1550nm		-
Core Cladding Concentricity (µm)	≤2.0	≤0.5		≤3.0
Core Size (µm)	18 - 22	9 (nominal)	5 (nominal)	134 - 137
<b>Pump Guide</b>				
Cladding Attenuation (dB/km)	≤15 @1095nm			-
Cladding Numerical Aperture	0.45 (nominal)			
Cladding Diameter (µm)	395 ± 5	125 ± 1		155 ± 1.5
<b>General</b>				
Operating Wavelength (nm)	1060	1550		800 - 1600
Coating Diameter (µm)	550 ± 15	245 ± 7		320 ± 20
Proof Test (%)	1 (100 kpsi)			
Coating Type	Low index fluoroacrylate			
Operating Temperature (°C)	-55 to +85			

LI - Low Index

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