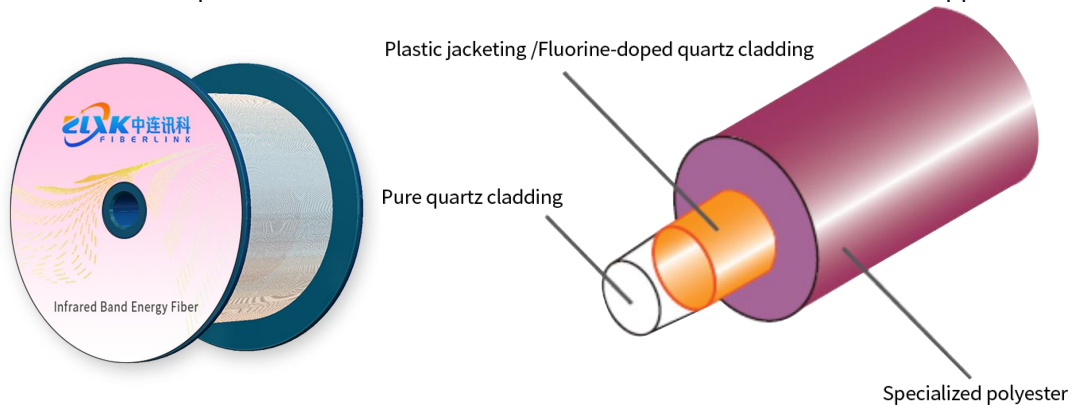


Infrared Band Energy Transfer Fiber

Product Description

The quartz-clad large-core diameter infrared energy transfer fiber is stable in devices and systems operating in the visible and near-infrared wavelengths; the 105-800 μm core diameter provides high coupling efficiency in data connections or other connectors, reducing the cost of equipment and components. The glass clad large core diameter fiber series has a gradient step refractive index distribution and fully optimized waveguide structure characteristics in the 850nm and 1300nm windows with very low attenuation and high bandwidth. This series of large core diameter fibers are available in different core diameters, cladding diameters and numerical apertures, and can be customized to meet the needs of different applications.



Features

- Larger fiber core diameter provides more efficient coupling to LED and laser sources
- More effective and convenient connections
- Adaptability to a wider range of temperature and humidity variation applications
- Excellent radiation resistance, better fatigue resistance

Applications

- High energy laser transmission
- Short and medium range communications
- Factory automation control
- Electrical signal transmission
- Locomotive pilot control
- Laser therapy and surgery
- Near infrared spectroscopy applications
- Optical thermometry
- Nuclear radiation monitoring High energy laser transmission



Typical Product Specification I										
Fiber Type	Core Diameter (μm)	Cladding Diameter (μm)	Coating Diameter(μm)	Core-cladding Concentricity Error (μm)	N/A of Fiber Core	Attenuation (dB/km)	Operating Temperature Range (°C)	Proof Test Level	Commercial Length Set (km)	
SIIR200/220-22/320	105.0±2.0	125.0±1.0	245±10	≤3.0	0.22±0.02	≤5.0	-55~85	100	Provide the right length according to customer needs	
SIIR200/220-22/320	200.0±3.0	220.0±2.0	320.0±20	≤3.0	0.22±0.02	≤8.0	-55~85	100		
SIIR220/242-22/320	220.0±3.0	242.0±2.0	320.0±20	≤3.0	0.22±0.02	≤8.0	-55~85	100		
SIIR600/660-22/960	105.0±1.5	125.0±1.0	245.0±10	≤3.0	0.22±0.02	≤10.0	-55~85	100		
Typical Product Specification II										
Fiber Type	Core Diameter (μm)	Cladding Diameter (μm)	Coating Diameter (μm)	Core-cladding Concentricity Error (μm)	N/A of Fiber Core	Attenuation (dB/km)	N/A of Inner Cladding	Proof Test Level (kpsi)	Commercial Length (km)	
SIDC135/155-22/320	135.0±2	155.0±1.0	320.0±20	≤3.0	0.22±0.02	≤5.0	≥0.46	100	Provide the right length according to customer needs	
SIDC200/220-22/320	200.0±3.0	220.0±2.0	320.0±20	≤3.0	0.22±0.02	≤5.0	≥0.46	100		
SIDC220/242-22/320	220.0±3.0	242.0±2.0	320.0±20	≤3.0	0.22±0.02	≤5.0	≥0.46	100		
Typical Product Specification III										
Fiber Type	Core Diameter (μm)	Cladding Diameter (μm)	Coating Diameter(μm)	Core-cladding Concentricity	Short-term Bending Radius	Long-term Bending Radius	Proof Test Level (kpsi)	Attenuation (dB/km)	N/A of Fiber Core	OH Content
IR800/880/1100 A22	800±2%	880±2%	1100±50		≥88mm	≥172mm	70Kpsi		0.22±0.02	Low OH
IR1000/1050-1400	1000±15μm	1050±15μm	1400±50μm	≤1%	≥115mm	≥230mm	70Kpsi	≤5dB/Km	0.22±0.02	Low OH
IR1000/1100-1400	1000±15μm	1100±15μm	1400±50μm	≤1%	≥120mm	≥240mm	70Kpsi	≤5dB/Km	0.22±0.02	Low OH

