



CIR-Chalcogenide IR-Glass Fiber

Chalcogenide InfraRed (CIR) glasses are the best As_2S_3 -based material for fiber optics in the range of 2 - 6 μm . CIR fibers transmit IR-radiation in the gap between silica fibers(0.2-2.4 μm) and Polycrystalline InfraRed (PIR) fibers (4-18 μm).

CIR fiber is drawn in core/clad structure with double polymer coating and characterized by a low optical loss and high flexibility.

The innovative glass purification process provides the attenuation spectra free from the OH absorption at 3 μm .

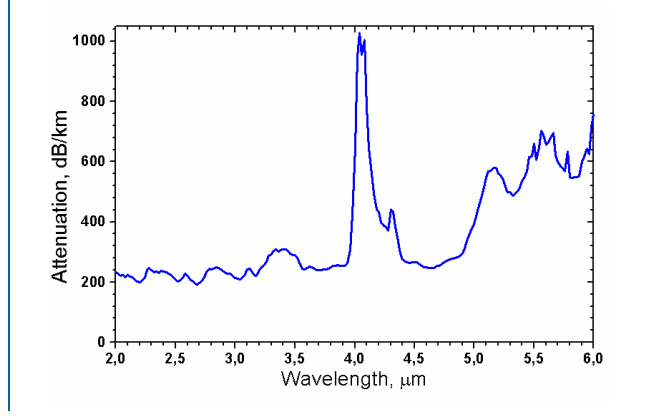
FEATURES

- high transmittance from 2 μm up to 6 μm
- suitable for low power delivery
- optical losses 0.2 dB/m at 2 - 4 μm
- double polymer coating for high flexibility
- durable cables with SMA-connectors

APPLICATIONS

- Flexible delivery for low power
- flexible IR-imaging systems
- remote non-contact pyrometry in the 200-600K range
- fiber probes for remote process IR - spectroscopy

CIR-Fiber Spectra



FIBER SPECIFICATION

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Transmission Range	2 - 6 μm
Core/Clad Structure	$As_2S_3/As-S$
Core/Clad Diameter	230/300, 455/515, 620/700, 750/900 10 μm
Core Refractive Index	2.4
Protective Coating	Double Polymer, OD 700 μm
Ambient Temperature Range	280 - 400 K

CIR Infrared Optical Fiber Standard Cables

Chalcogenide InfraRed (CIR) (2-6 μm) fiber is drawn in core/clad structure with double polymer coating and characterized by a low optical losses and high flexibility. Below are standard cable sizes and prices. Delivery is from stock or within few weeks ARO. All standard cables include PEEK-polymer protective jacket and SMA termination.

Part Number	Description	Wavelength Range	Price/ 1m cable	Price/ additional meter length
CIR250/300 250 μm core CIR	fiber cable with PEEK protective tubing and SMA termination	2-6 μm	call	
CIR400/500 400 μm core CIR	fiber cable with PEEK protective tubing and SMA termination	2-6 μm		
CIR500/550 500 μm core CIR	fiber cable with PEEK protective tubing and SMA termination	2-6 μm		