

Chalcogenide (CIR) Fiber Bundles, Convertors and Splitters







art photonics GmbH development of specialty fibers for the Mid-IR region has resulted in a unique product – Chalcogenide Infra-Red (CIR-) fibers. Chalcogenide glasses (As₂ S₃) transmit IR-radiation in the spectral range of 1.1 – 6µm. Our CIR fibers are drawn in core/clad structure with double polymer coating and characterized by low total optical losses and low absorption peaks over mentioned spectral range.

High flexibility & high transmission of our chalcogenide fibers allowed producing commercial fiber bundles & convertors for Mid-IR applications.

Features

- Custom design
- Customized fiber arrangement and splitting
- Standard and customized connectors
- Mixed fiber bundles (UV,NIR,MIR) are available

Applications

- Flexible IR-imaging systems
- Remote non-contact pyrometry in the 200-600K range
- Fiber probes for remote process IR spectroscopy

CIR Fiber Bundle & Convertor Specification

Design	Rectangular to Circular Circular to Circular
Core/Clad Fiber Diameter	250/300; 350/400; 500/550 μm
Number of Fibers	Up to 37 in hexagonal configuration more - on request
Length of Bundle	0,5 - 5 m
Types of Protective Jackets	PVC, PC + Nylon, Rigid Metal Housing
Spectral Range	1,1 to 6,0 µm