Polycrystalline IR-Fibers & Cables

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erm of this patent is twenty years from Suitable for CO₂- laser power delivery up to 50W

(0.1-0.5 dB/m) Industry Chicksonsins

Standard fiber diameters from

High flexibility and no toxicity

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art photonics development of unique extrusion technology for the Mid-Infrared fibers has resulted in a production of Core / Clad Polycrystalline Infra-Red (PIR-) fibers. The PIR-fibers are non-toxic, very flexible and transparent across a broad spectral range 3 -18 µm and capable for operating over the wide temperature range from 4K to 420K.

Applications:

dications under 35 U.S.C. 120, 121 or 365(c Low attenuation at 10.6µm

0.3 to 1.0mm

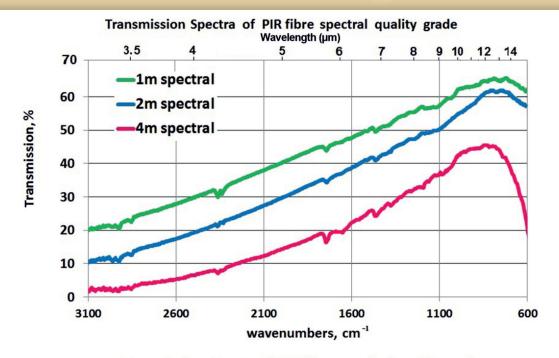
No aging effect

Spectroscopy Probes for Liquids, Gases & Solids

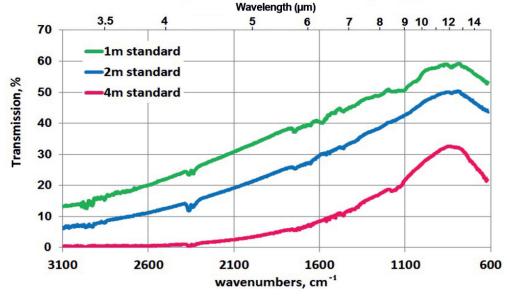
- Flexible Pirometry in Mid-IR
- Flexible IR-imaging Systems
- Power delivery for CO & CO₂ Lasers
- Fiber Coupled QCL

| Fiber Specification | | | | | |
|---|-------------|-------------|-------------|--------------|--|
| Standard Fibers | PIR-240/300 | PIR-400/500 | PIR-630/700 | PIR-900/1000 | |
| Core diameter, um | 240 | 400 | 630 | 900 | |
| Cladding diameter, um | 300 | 500 | 700 | 1000 | |
| *other diameters are available on request | | | | | |

| Transmission Range | 3 – 18 um | |
|------------------------------|---|---|
| Core material | AgCl _{0.25} Br _{0.75} | STATE AND |
| Cladding material | AgCl _{0.50} Br _{0.50} | は正常であるようななよう |
| Protective tubing | PEEK | A STREAM AND A STREAM |
| Core Refractive Index | 2.15 | のなどないないなどので |
| Effective NA | 0.3 | |
| Minimum bend radius | 100 x Fiber diameter | |
| Operating temperature, °C | -270 < T < 150 | |
| Maximum transmitted Power, W | 40 (CW) | 調査部であるとなる |



Transmission Spectra of PIR fiber standard quality grade



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