

# Optran® MIR

## Silver halide fiber

This unique fiber, which comprises a photosensitive compound (AgCl, AgBr), offers extremely low attenuation values in the mid-infrared (MIR) range.

### Wavelength

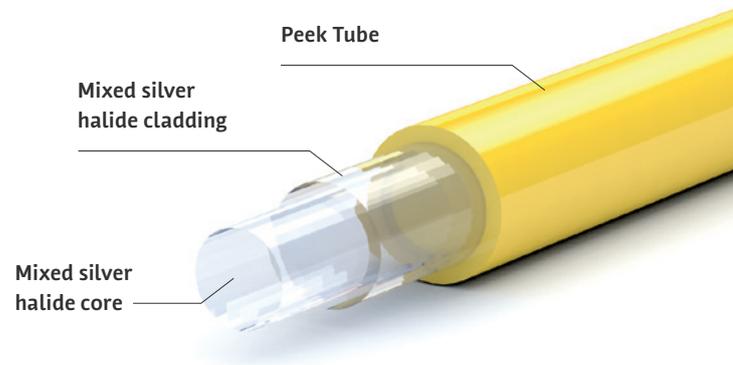
Optran® MIR 4–18  $\mu\text{m}$

### Numerical aperture (NA)

Low	0,13 $\pm$ 0,02
Standard	0,25 $\pm$ 0,02
High	0,35 $\pm$ 0,02

### Advantages

- Optimised for CO- and CO<sub>2</sub>-laser
- Low attenuation in the MIR range
- Robust and flexible
- Non-hygroscopic material
- Highly reliable connectors available
- Available in core / cladding or pure core versions



### Technical data

Wavelength / spectral range	Optran® MIR: 4–18 $\mu\text{m}$
Numerical aperture (NA)	0,13 $\pm$ 0,02   0,25 $\pm$ 0,02   0,35 $\pm$ 0,02
Operating temperature	-60 to +110 °C
Standard diameter	Core / cladding ( $\mu\text{m}$ ) 400 / 500 $\mu\text{m}$   600 / 700 $\mu\text{m}$   860 / 1000 $\mu\text{m}$
Calculation index (core)	2,1
Reflective losses @ 10.6 $\mu\text{m}$	25 %
Minimum bending radius	100 $\times$ cladding diameter
Highest power	30 Watt

### Applications

First choice for applications including CO<sub>2</sub>-laser guides, FTIR spectroscopy, laser surface treatments and many more.