

Fiber Optic ATR-Probe for Lab Applications



art photonics

FlexiSpec®

Evanescent absorption spectra
without dead zone problems

Optimal ATR- crystal selection
to match customer application

Cost effective solution for
in-line reaction monitoring

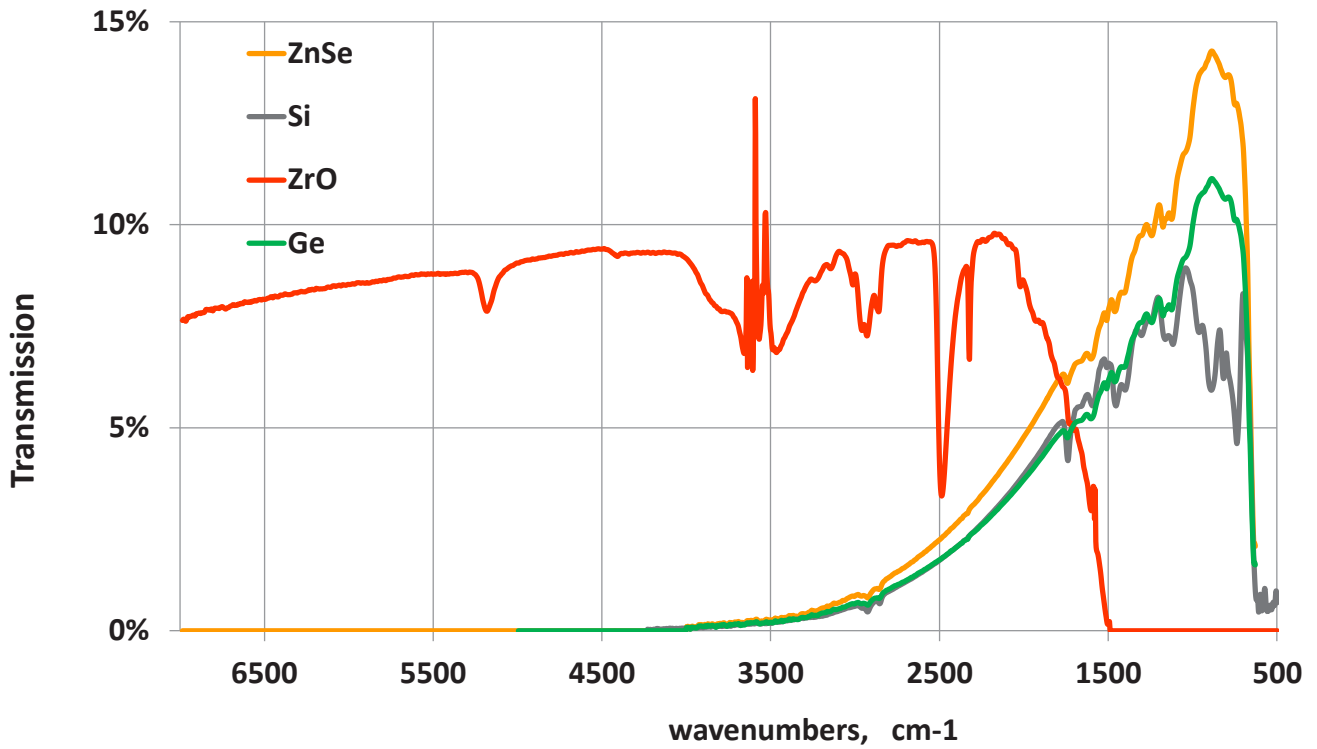


Our new designed IR fiber ATR probes with PEEK shaft are cost effective and perfect for use in small lab reactors and open vessels. All ATR probes from FlexiSpec® product line are compatible to any type of FT-IR and other IR-spectrometers, photometers and sensors.

Applications:

- Reaction Monitoring in real time
- Remote Polymerization Control
- Crystallization Process Screening
- In-situ IR-Spectroscopy for soft surfaces, pastes and liquids

Transmission spectra of PEEK probes with different ATR elements. Probe length 1.5m



Specification of Fiber Optic ATR-Probes for lab application *FlexiSpec*[®]

Type of ATR element	ZnSe	Ge	Si	ZrO
Transmission range	3.2-17µm (3100-600cm ⁻¹)	3.2-17µm (3100-600cm ⁻¹)	3.2-17µm (3100-600cm ⁻¹)	1.1-6.5µm (9000-650cm ⁻¹)
Fiber type	PIR-900/1000	PIR-900/1000	PIR-900/1000	CIR-500/550
Temperature range	-100°C / +140°C	-100°C / +140°C	-100°C / +140°C	-100°C / +90°C
Pressure (max)	7 Bar	7 Bar	7 Bar	7 Bar

Common Parameters of Fiber Optic ATR-Probes *FlexiSpec*[®]

Total Length	1.5m (opt.: 1m to 5m)
Shaft Length	150mm (opt.: 100mm to 500mm)
Shaft Diameter	6.3mm
Shaft Material	PEEK (polyetheretherketone)
Length of Legs	500mm (opt.: 200 - 500mm)
Protective Tube Material	PEEK
Minimal Bending Radius	130mm
Input / Output Connectors	Long SMA (opt.: any other type)

