Fiber Optic Sampling Products

Fiber optic sampling accessories provide a new dimension of flexibility – expanding the reach of the sample compartment. The sampling probe now is flexible and may be taken to the sample; maybe an unwieldy sample – too large to be fit onto an accessory. PIKE Technologies offers NIR and Mid-IR versions of fiber optics sampling accessories.

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FlexIR – Mid-IR Fiber Optic Accessory
For remote and flexible sampling in the Mid-IR spectral region

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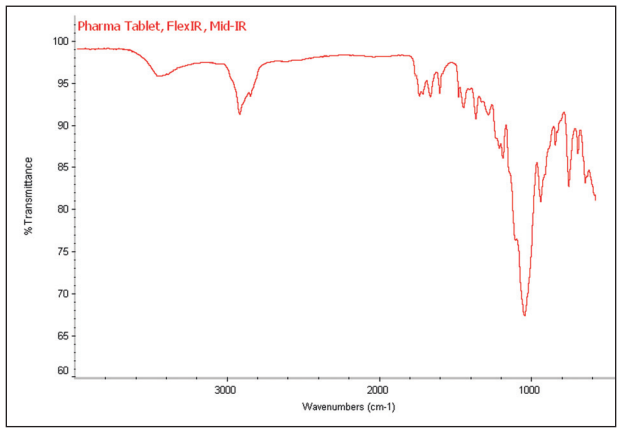
FlexIR – NIR Fiber Optic Accessory
For remote sampling in the NIR spectral region

FlexIR – *Mid-IR Fiber Optic Accessory for Remote and Flexible Sampling in the Infrared Spectral Region*

Features of the FlexIR

- *Fast, easy identification of solids and liquid samples in situ*
- *1 meter, high throughput mid infrared fibers providing excellent spectral data with short analysis time*
- *Spectral range from 6600 to 580 cm^{-1} depending upon choice of fiber*
- *Integrated, high sensitivity MCT detector with electronics connection for your FTIR spectrometer*
- *Standard SMA connectors providing maximum flexibility with fiber probes*
- *Standard ATR and transflectance sampling probes for convenient and flexible analysis*
- *Compatible with most FTIR spectrometers*

The PIKE FlexIR™, Mid-IR fiber optic accessory is an excellent tool for remote and specific area analysis of a wide variety of samples. Visible surface contamination, small area material identification and bulky materials too large to fit into the FTIR sample compartment are just a few of the many applications for the FlexIR accessory.



Spectrum of Pharmaceutical Tablet measured with the FlexIR Mid-IR Fiber Optic Accessory

The PIKE Technologies FlexIR Mid-IR fiber optic accessory is designed for high performance and short analysis time. The integral MCT detector enables data collection in a fraction of the time required for analysis using a TGS detector. The combined set of chalcogenide and silver halide fibers provides a full spectral range from 6700 to 580 cm^{-1}.

The PIKE Technologies FlexIR Mid-IR Fiber Optic Accessory is built and tested for optimum performance for your FTIR spectrometer.

Ordering Information

FlexIR Mid-IR Fiber Optic Accessory

Part Number	Description
045-30XX	FlexIR Mid-IR Fiber Optic Accessory

Notes: The FlexIR is provided with base optics mounting for the sample compartment of your FTIR spectrometer, the ATR and transflectance sampling probes and includes electronic cabling. Your FTIR spectrometer must be compatible with interface to a sample compartment detector. Please see the FTIR instrument code sheet.

FlexIR Mid-IR Fiber Choices *(select one or more)*

Part Number	Description
045-4010	1 meter chalcogenide fiber for FlexIR Mid-IR Fiber Optic Accessory
045-4020	1 meter halide fiber for FlexIR Mid-IR Fiber Optic Accessory
045-4030	Combined set of chalcogenide and halide fibers for FlexIR Mid-IR Fiber Optic Accessory

Notes: The spectral range of the chalcogenide fiber is 6600-1680 cm^{-1}. The spectral range of the halide fiber is 2100-580 cm^{-1}.

FlexIR – *NIR Fiber Optic Accessory for Fast and Remote Sample Identification*

Features of the FlexIR

- *Fast, easy identification of solids and liquid samples in-situ*
- *2 meter, low-OH fibers providing exceptional throughput and excellent spectral data with short analysis time*
- *Spectral range from 1.0 to 2.5 microns (10000 to 4000 cm^{-1})*
- *Integrated, high sensitivity InGaAs detector with electronics connection for your FTIR spectrometer*
- *Standard SMA connectors providing maximum flexibility with fiber probes*
- *Standard diffuse reflectance sampling tip with inert sapphire window for solid samples*
- *Optional transflectance sampling tip for liquid samples*
- *Compatible with most FTIR spectrometers configured for NIR operation*

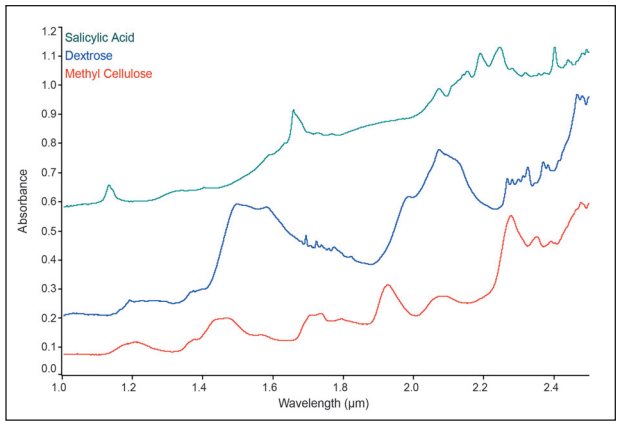
The PIKE FlexIR™, near-IR (NIR) Fiber Optic Accessory is an excellent tool for remote and speedy analysis of a wide variety of materials. Powders, plastics, coatings, and liquid samples are readily measured – typically within 30 seconds. The FlexIR accessory is ideal for performing incoming QC of materials used in pharmaceutical, polymer, and chemical manufacturing.

NIR sampling is fast and efficient as it eliminates the need for sample preparation. The FlexIR accessory further speeds the analysis since the probe tip is simply touched onto the sample, often in drums, and the spectrum is collected. Powdered samples packaged within a plastic bag can be analyzed without removal from the bag and this further speeds analysis time and eliminates analyst exposure to chemical materials.

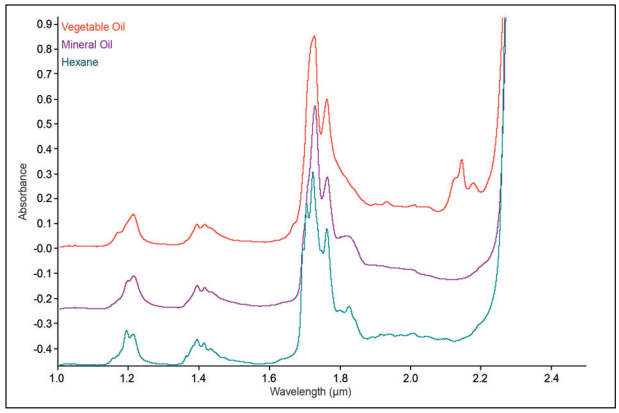
The PIKE Technologies FlexIR NIR Fiber Optic Accessory is designed for maximum throughput and performance. The fiber optic cable is directly coupled to the integrated indium gallium arsenide (InGaAs) detector – eliminating energy loss due to additional transfer optics and beam divergence.

With the optional Liquids Sampling Tip, it is easy to identify incoming liquids by inserting the wand tip into the liquid sample and collecting its spectrum.

The PIKE Technologies FlexIR NIR Fiber Optic Accessory is built and tested for optimum performance for your FTIR spectrometer.



Spectra of In-Coming Pharmaceutical Materials measured and verified with the FlexIR NIR Fiber Optic Accessory



Spectra of Incoming Liquid Materials measured and verified with the FlexIR NIR Fiber Optic Accessory

Ordering Information

FlexIR NIR Fiber Optic Accessory

Part Number	Description
045-10XX	FlexIR NIR Fiber Optic Accessory

Notes: The FlexIR is provided with base optics mounting for the sample compartment of your FTIR spectrometer and includes electronic cabling. Your FTIR spectrometer must be configured with NIR beamsplitter and NIR source for optimum performance of the FlexIR accessory. Please see the FTIR instrument code sheet.

FlexIR NIR Fiber Optic Accessory, Sampling Options

Part Number	Description
045-2000	Liquids Sampling Tip for FlexIR, 1.5 mm pathlength

Notes: The Liquids Sampling Tip is screw mounted and easily exchanged with the solids sampling tip on the FlexIR sampling wand.