

ATR-Loop InfraRed Fiber Optic Probes



art photonics

FlexiSpec[®]

High throughput at Mid InfraRed range

On-line absorbance spectroscopy
of liquids, pastes & soft solid surfaces

Compatible with all FTIR, QCL and
IR-Filter spectrometers

Cost effective alternative to more
expensive ATR-IR-fiber probes

Replaceable ATR Loop PIR-Fiber Tips

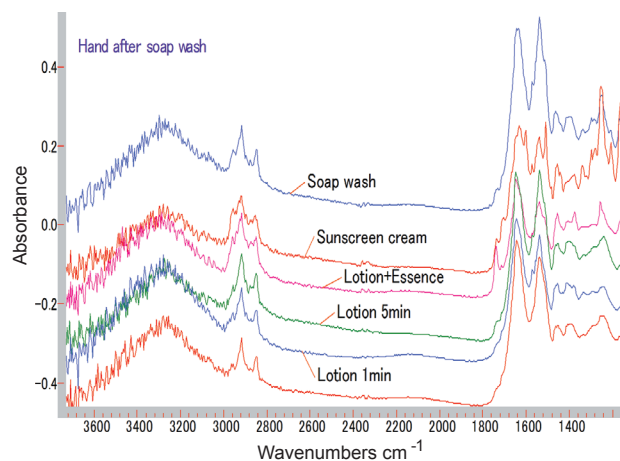
ATR-Loop Infrared PIR-fiber probe was the first in **FlexiSpec[®]** product line designed for use with FTIR and other Mid IR spectrometers. ATR-Loop PIR-fiber probes are perfect for remote analysis of composition of liquids, pastes and soft surfaces with no need in sample preparation.

Loop fiber probe is the simplest one in **FlexiSpec[®]** product family to enable low cost ATR-spectroscopy

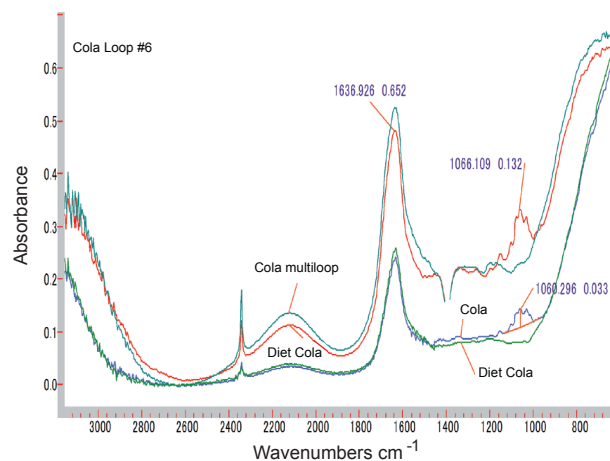
Applications:

- Remote evanescent absorption (ATR-) spectroscopy in-citu
- Multiple ATR-spectroscopy by immersion of fiber loop in liquid
- In-vivo molecular spectroscopy for medical diagnostics by simple touch of ATR-Loop to skin or tissue

Skin Absorption Spectra with ATR-Probe



Cola Spectra with DLP-probe



Specification of Fiber Optic ATR-Loop Probes *FlexiSpec*[®]

Probe type	Chalcogenide-IR (CIR)	Polycrystalline-IR (PIR)
Transmission range	6500 – 1700cm ⁻¹	3600 – 600cm ⁻¹
Fiber type	Chalcogenide glass (As-S)	Silver Halide (AgCl:AgBr)
Temperature range	≤ 90°C	≤ 100°C

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

Total Length	1m (opt.: PIR up to 5m, CIR up to 10m) *
Shaft Length	120mm *
Shaft Diameter	10mm
Shaft Material	PEEK
Protective Tube Material	PEEK
Input / Output Connectors	Long SMA-905 (opt.: any other type)
Detachable PIR fiber Loop	Loop; Multi-Loop (Double-, Triple-Loop, etc.) *

*Customized dimensions are available on request



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