

FI-RXF100-RT

FI-RXF100-RT Rotating-Transmission FTIR Liquid Analyser

A liquid analyser that combines the high optical throughput of transmission with the easy sample loading of ATR: one drop on the crystal. Its rotating head carries up to four ZnSe windows of different path lengths — 30, 50, 100, 200 μm or custom — plus a cleaning position.

Best for: Quantitative analysis of oils and their impurities, organic solvents and solutions, and aqueous systems.



4 + 1

Windows + cleaning position

30–200 μm

Standard path lengths

ZnSe

Window crystal

50 ×

ATR reflections matched by 100 μm

Overview

High transmission throughput, simple to use. The FI-RXF100-RT combines the high optical throughput of the transmission method with the easy sample preparation of ATR, and its rotating head takes up to four optical windows of different path lengths plus one cleaning position, to meet different testing needs.

The rotating transmission module is integrated with the FTIR main unit and uses high-throughput ZnSe crystals for excellent sensitivity. The indexed rotating head turns clockwise or anticlockwise and keeps sampling precise and repeatable. Fit one to four windows of fixed path length as needed, and add other path lengths later.

Path lengths of 30, 50, 100 and 200 μm are available, as well as custom path lengths. 100 μm is the usual choice for quantitative liquid analysis; converted to ATR it is equivalent to 50 reflections at 1000 cm^{-1} , which is why the transmission sensitivity is so high. The path length of the rotating module corresponds to the thickness of a liquid cell.

Features

Advantages over conventional liquid measurement

- Windows of different path lengths fitted at once and switched by rotating the head
- Loading is simple and quick: one drop of liquid on the crystal, as with ATR
- High-sensitivity, high signal-to-noise spectra, fast
- Easy cleaning
- Rotating heads with custom path lengths to suit your concentration range
- DLaTGS or MCT detector

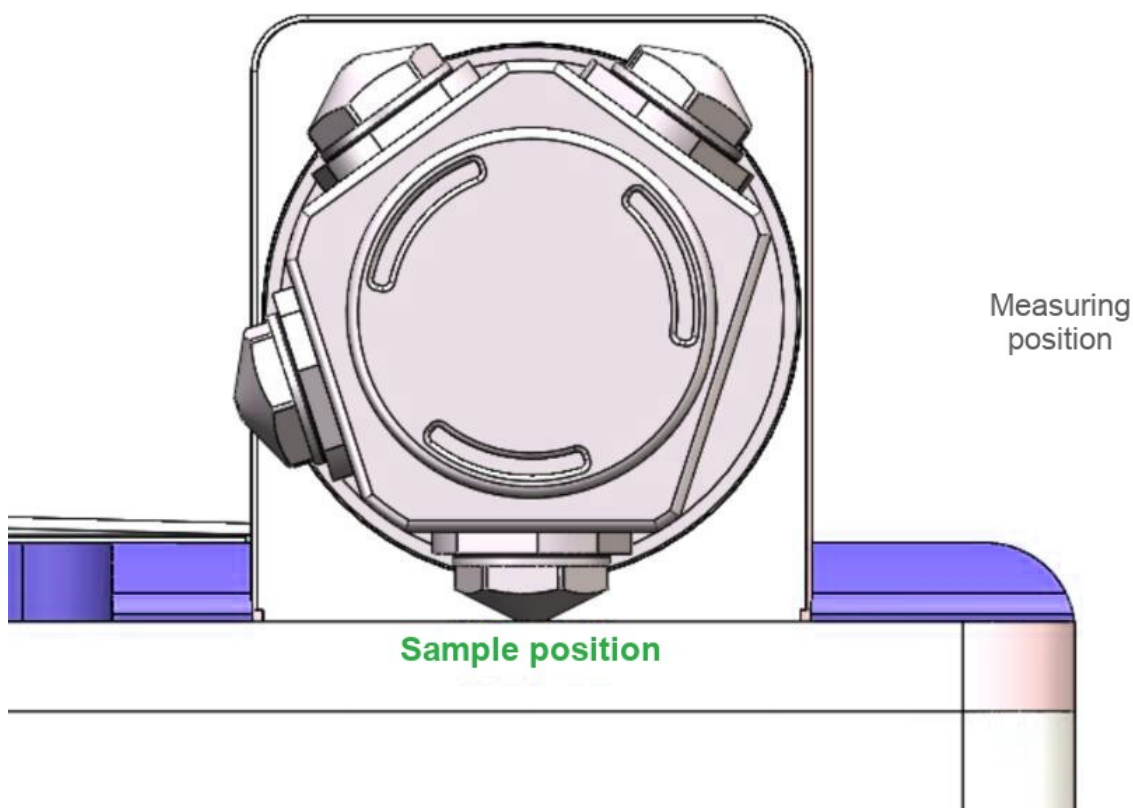
Specifications

Rotating transmission module	
Design	Rotating transmission module integrated with the FTIR main unit
Crystal	ZnSe, high throughput
Positions	Up to four windows of fixed path length plus one cleaning position; further path lengths can be added later
Path lengths	30, 50, 100 and 200 μm , or custom
Rotating head	Indexed; turns clockwise or anticlockwise
Detector	DLaTGS or MCT
Platform	FI-RXF100 series; can also be configured as a mobile spectrometer

Applications

- Organic solutions
- Organic solvents
- Quantitative analysis of oils and their impurities
- Aqueous systems

Figures



The rotating head in the measuring position, with the selected window at the sample position.



The rotating transmission module on the analyser.

Request a quotation

Tell us what you measure and we will configure the FI-RXF100-RT — sampling accessories, detector and libraries — for it.

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