



● ALPHA FT-IR Spectrometers

About the size of a lab book, the very small FT-IR spectrometer ALPHA will play a big part in your daily routine. Plug & play set-up, easy-to-use software, combined with QuickSnap™ sampling modules assure powerful and reliable FT-IR analysis you expect from Bruker.

- Low-cost, small foot print FT-IR spectrometer
- Easy software: an assistant guides you through all the steps of your FT-IR analysis
- Quality components with long lifetime
- Flexibility: QuickSnap™ sampling modules for transmission, ATR and reflection
- RockSolid™: robust, high performance results with Bruker's well-proved interferometer design

Very Compact and Smart FT-IR Spectrometer

The ALPHA will save you the much needed bench space in your laboratory. ALPHA's footprint is very small, it only takes up a 22 cm by 30 cm space (about 8" by 11"). Due to its modular design the ALPHA always provides the adequate configuration for your analytical question.

No Sacrifice in Performance

The ALPHA interferometer is based on Bruker's well-proved RockSolid™ design, which is used in our laboratory and rugged process spectrometers. This means the ALPHA delivers the performance and reproducible results people have come to expect from a Bruker FT-IR spectrometer.

Practicality for Routine Analysis

The ALPHA makes FT-IR analysis simpler than it has ever been before. With its plug-and play operation and ease of use, ALPHA brings practicality to FT-IR spectroscopy. You can transfer methods from system to system seamlessly for future cost savings on method development. ALPHA offers all the capabilities you expect to achieve for a routine analysis.



QuickSnap™ Sampling modules can easily be exchanged without the need for any tool.



A variety of sampling modules allow the analysis of almost any kind of sample.



ALPHA's Platinum ATR sets new standards in ease of use.

QuickSnap™ Sampling Modules

The ALPHA offers full sampling flexibility. User exchangeable QuickSnap™ sampling modules allow the analysis of almost any kind of sample (e.g. solids, liquids or gases).

ATR Sampling Modules

Attenuated Total Reflection (ATR) is an easy-to-use FT-IR sampling method that is ideal for both solids and liquids. Typically no sample preparation is required: The sample just has to be pressed on the ATR crystal.

The Eco ATR is a single reflection ATR sampling module with a very attractive cost/performance ratio. It is equipped with a high throughput ZnSe ATR crystal.

ALPHA's Platinum ATR modules are designed for easiest routine analysis. An innovative one-finger clamp mechanism simplifies the sampling. The pure diamond-ATR crystal that is brazed into the work disc provides outstanding mechanical and chemical robustness. Options for temperature controlled measurements and liquid flow through analysis complete the Platinum's versatility.

The Multireflection-ATR module with horizontal ZnSe ATR crystal is very suitable for the analysis of pastes, gels and liquids. Six internal reflections and an exceptionally high light throughput provide highest ATR measurement sensitivity for the analysis even of low concentrated sample components.

Universal Sampling Module

The universal sampling module enables you to analyze solids, liquids and gases. Its transmission sample compartment houses holders for the analysis of pellets or films. Liquid and gaseous samples are investigated using adequate transmission cells.

Reflection Modules

The Diffuse Reflection (DRIFT) module is an economical option for the analysis of a broad variety of solid samples like powders, inorganic material and gem stones.

A variety of modules for external reflection measurements allows contactless and non-destructive FT-IR analysis of large samples on top or in front of the spectrometer. A video camera option provides view of the sampling area.

OPUS software

Intuitive Workflow

The ALPHA makes FT-IR analysis simpler than it has ever been before. The OPUS software, with its easy and intuitive user interface, guides the operator through all the steps of an analysis. The user interface can easily be customized for dedicated applications or experiments.



With OPUS your daily quality control routine is in few mouse clicks.

Quality control made easy

The predominant question in quality control is to verify that the sample meets its specifications.

With QuickCompare the appropriate evaluation function is provided. QuickCompare methods are set up without effort and the evaluation result is clear and safe.

Furthermore, the identification of unknown samples is of importance, e.g. of a contamination that caused a product failure. Identification results from an automated search of an analogue reference spectrum in spectral libraries.

Technologies used are protected by one or more of the following patents: DE 102004025448; DE 19940981; US 5923422; DE 19704598

Bruker Optics is ISO 9001 and ISO 13485 certified.

Laser class 1 product.

www.bruker.com/optics

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