The FTIR spectrometer ALPHA II combines outstanding quality with a small footprint and sets a benchmark in terms of user convenience. With the integrated panel PC and the touch-based operation, FTIR spectroscopy has never been easier.

- Very robust and compact FTIR spectrometer with integrated design
- Convenient touch panel operation with intuitive software, suitable even for beginners
- Smart system monitoring and automation ensures high reliability
- Dedicated design for any application by exchangeable sampling modules
- Low costs of ownership thanks to high quality components with long life time, and low power consumption

**Intuitive & Integrated**

The ALPHA II features a new way to operate an FTIR spectrometer. With the integrated panel PC and the dedicated OPUS-TOUCH user interface it takes only three touches for measurement, evaluation and report generation.

**Enhanced Performance**

Owing to technical innovations such as advanced stabilization of source and detector the ALPHA II provides higher sensitivity, higher spectral resolution, extended spectral range and further increased robustness.

The ALPHA II includes a durable diode laser that achieves a very high wavenumber accuracy. The well proven RockSolid™ interferometer accomplishes consistent high quality results with outstanding stability.

**Efficiency in Routine Analysis**

The ALPHA II is ideally suited for quality control tasks like incoming goods inspection or the testing of intermediate and final products. Identifying unknown samples with the ALPHA II is straightforward, thus, making it a versatile tool for forensics and for failure or competition analysis.

Moreover, the ALPHA II is very suitable for quantitative analysis providing optimal measurement conditions for all types of samples.
Design Follows Application
The ALPHA II offers full sampling flexibility for any kind of sample (e.g. solids, liquids or gases) with always perfectly matched instrument configuration. A broad range of FTIR sampling accessories for transmission, attenuated total reflection (ATR), external and diffuse reflection allows a variety of applications.

PermaSure™ Technology
The ALPHA II provides results with high reliability. The QuickSnap™ sampling modules are automatically recognized and tested. An individual calibration of each sampling module ensures highest wavenumber accuracy. All vital spectrometer components like source, detector and interferometer as well as the internal humidity status are continuously monitor by the Performance-Guard™ system diagnostics. Periodically performed test measurements verify the functionality of the ALPHA II according to its specification.

Validation
The ALPHA II is prepared to fully support your validation needs; from the design qualification (DQ) to daily performance qualification (PQ). ALPHA II incorporates an Internal Validation Unit (IVU) with an integrated certified reference standards for automated Operational and Performance Qualification (OQ/PQ).

Low Cost of Ownership
The ALPHA II is designed to be used for many years with low running costs. Its housing is made from robust metal. The ALPHA II employs a modern diode laser with a lifetime of over 10 years. The CenterGlow™ infrared source has been engineered for a lifetime longer than 5 years and offers an advanced stabilization that ensures ideal intensity over the complete lifetime. The Platinum Diamond ATR module has a minimum lifetime of 10 years.

These quality features are completed by the RockSolid™ interferometer with more than 10 years time of operation. Adding the low energy consumption these outstanding characteristics result in significant cost savings.

- 10 years warranty on interferometer, laser and diamond ATR module
- 5 years warranty on IR source

Portability
With the footprint of a laboratory notebook, the ALPHA II is a very compact and integrated solution. It is highly insensitive to vibrations and can be placed nearly anywhere. The ALPHA II can be transported from lab to lab, and fits into the fume hood or a glove box without difficulty.

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

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OPUS-TOUCH
With its ultra-slim multi touch panel pc the ALPHA II permits the highest level of soft- and hardware integration.

Using the OPUS-TOUCH interface typical quality control and material verification applications are performed in an extremely convenient manner.

The built-in spectra viewer offers the data evaluation and data processing functions which are needed for in-depth analysis of your IR-data.