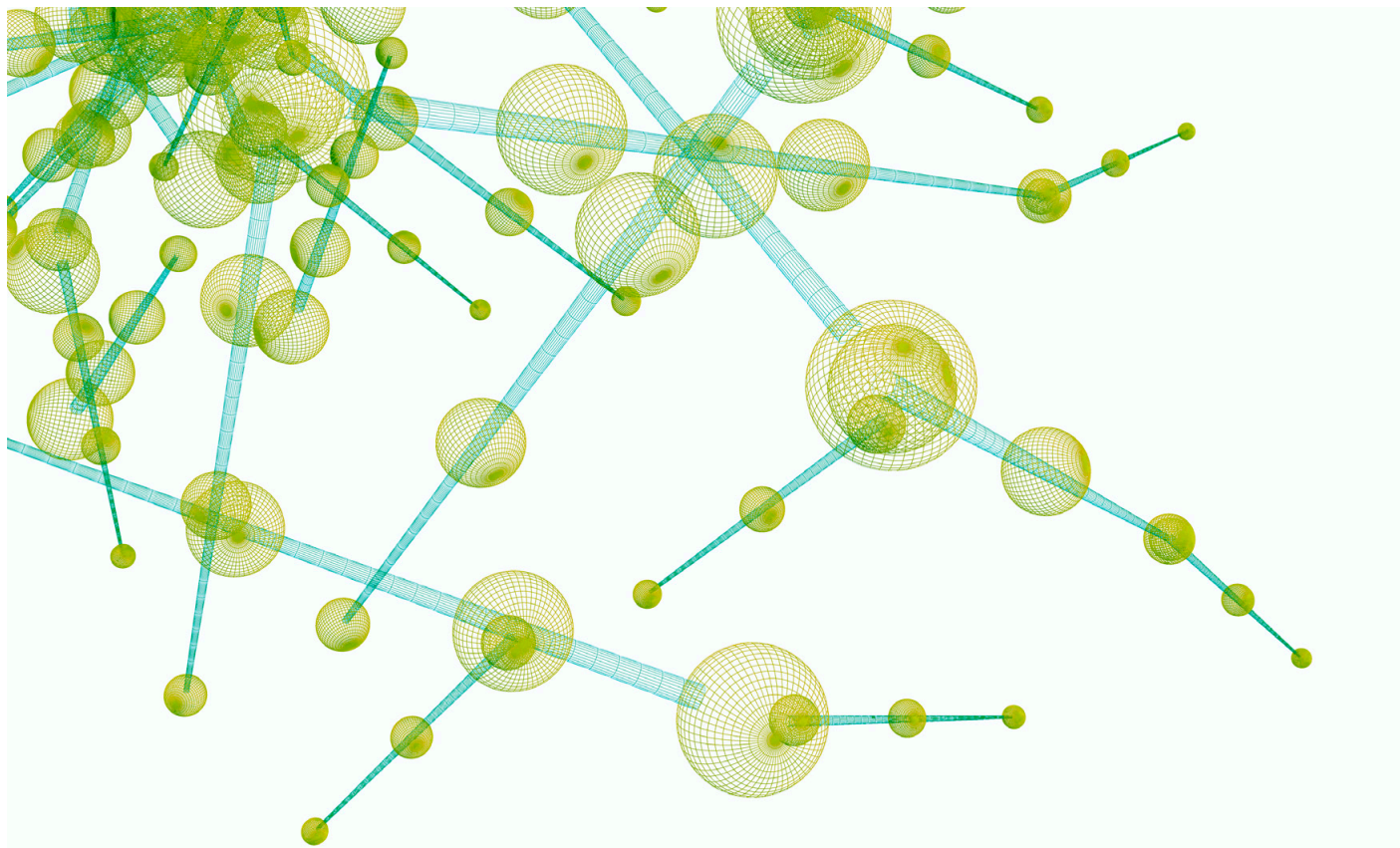


Measurement & Analytics | Measurement made easy

Advanced spectroscopy software for quantitative
and qualitative analysis
Horizon MB FTIR

Intuitive Spectroscopy Software for MB3000 and MB3600 Spectrometers



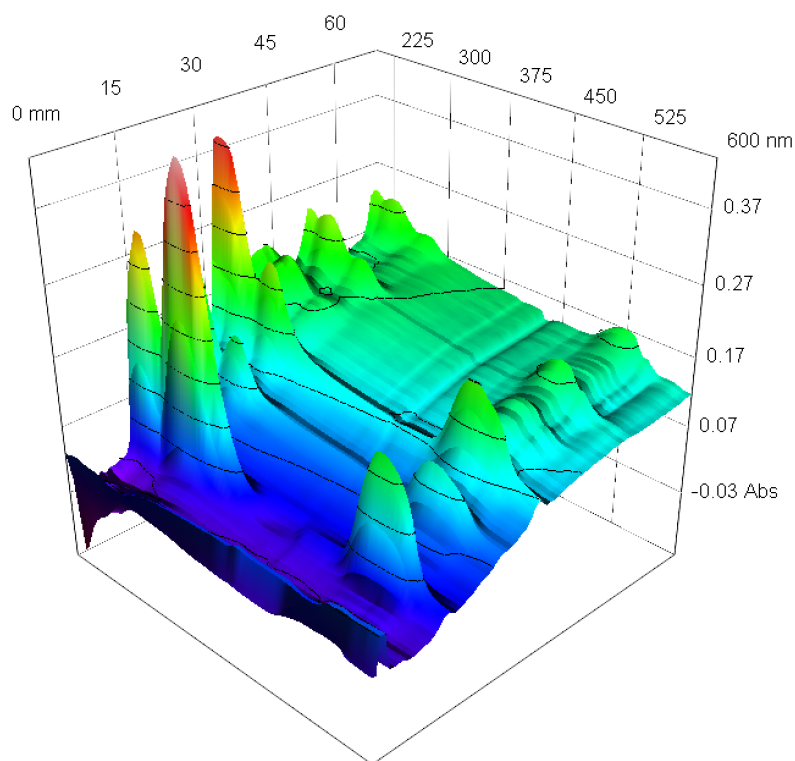
Easy to Use

The Horizon MB™ FTIR software makes it easy to acquire, process and analyze data. Its customizable work environment and intuitive interface enables you to get your work done and to manage your results. With numerous data importing and exporting options, Horizon MB™ makes short work of your data conversions. Adapting to the new Horizon MB™ FTIR software is both easy and painless.

Intuitive Workspace

The workspace gives an overview of all the important functions and frequently used tasks in a configurable display.

1. Spectra are displayed in the main window
2. The project explorer organizes spectra and other data. These can be grouped into projects
3. The toolbar can be customized to hold the most frequently used functions
4. All functions can be accessed from the menu bar
5. The properties window provides audit information and details on the current spectrum and open libraries



Configurable Workspace

Lay out the workspace to simplify your tasks and save it. Each user can have their own customized toolbars and layouts in a saved profile.

Multiple Viewing Options

Visualize your data the way you like with numerous viewing options including: 2D, 3D, split, offset, overlay and table view. You can easily exchange your displays and data to Microsoft Office™ using cut and paste.

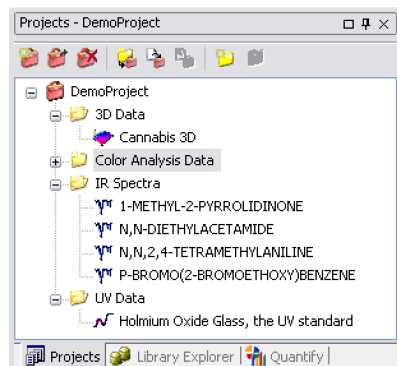
Monitor Your Instrument

Integrated health monitoring ensures that your instrument is working at its best.

Flexible Modules

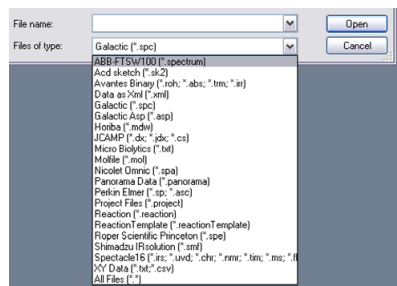
All the available functions are packaged in modules, so you only use and pay for what you need.

Horizon MB™ FTIR Software Functions



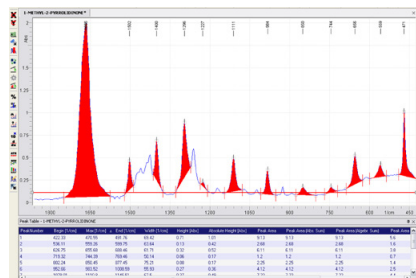
Data Management

Data can be saved as individual spectra or as part of a project. The project explorer allows you to view available data. A project structure allows you to store all spectra, associated data and calibration information in one place.



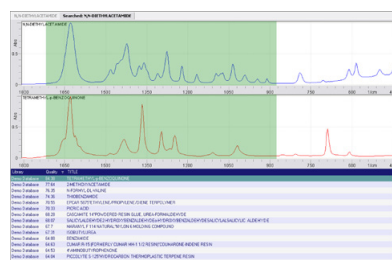
Data Conversion

Data can be opened or saved in most common formats. This makes transferring data from your existing instruments very easy.



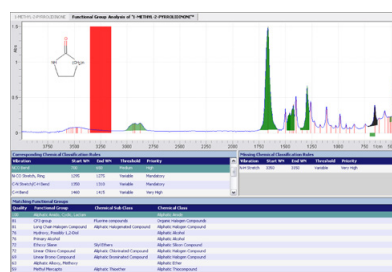
Spectral Manipulation

Horizon MB™ includes a comprehensive set of math functions and data tools including peak picking, spectral subtraction and baseline correction.



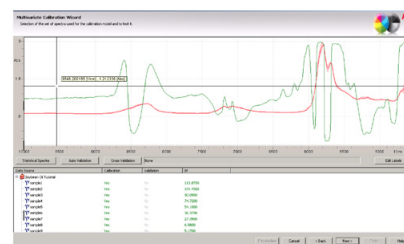
Library Searching

Library searching is available for quality control and identification. Multiple library formats are supported allowing you to use your existing libraries including most commercial libraries. It is simple to build a custom library suited to your application.



IR Interpretation

The IR Interpretation module analyzes IR spectra. This analysis allows you to easily identify functional groups using the IR interpretation rule database.



Quantify Wizard

Quickly develop a quantitative method from your samples using the quantify wizard to build either univariate or multivariate calibrations. The wizard leads you through the steps to make it quick and easy.

Validation Report 2008-07-28 11h07m54s

Spectrometer OpenBeam Regulatory Validation Report

Validation Status: **PASSED**

Report Number: 2008-10-28 11h07m54s
Performed by: CALIBOU
Associated Validation Template: VAL0001_MB3000_DTGS_OpenBeam_rev2-0 LBO.csv
Validation Type: Basic

Spectrometer model: MB3000
Serial Number: 1234567-345
Accessory model: R-
Serial Number: R-
Detector model: 2445537-2806833 **Detector Gain:** 9
Serial Number: 7654321-321

Resolution: 1
Scans: 4
Number of measurements: 1
Comment:

Basic Validation

	Tolerance Min	Tolerance Max	Status	Minimum	Maximum
Line Position (cm-1) [1915-1920]	1917.88	1918.08	Passed	1917.984	1917.984
Line Width (cm-1) [1915-1920]	0.06	0.75	Passed	0.6612872	0.6612872
Line height (Abs) [1915-1920]	0.06	0.4	Passed	0.1311385	0.1311385
Energy below cut-off (%) [300-40]	-0.1	0.1	Passed	0.01375564	0.01375564
SNR at 1050 (rms) [1000-1100]	500	10000	Passed	2544.255	2544.255
SNR at 4150 (rms) [4100-4200]	800	10000	Passed	3259.135	3259.135

Validation

Numerous validation routines integrated in the software verify that your instrument is operating as it should. Validation can be performed in accordance with ASTM and/or Pharmacopeia protocols.

Acquisition Validation Health Monitoring

IR Source **OK**

- Hour of use nominal OK
- Current OK
- Voltage OK
- Electronic Temperature OK

Metrology **OK**

- Electronic** **OK**
- Detector** **OK**
- Interferometer** **OK**
- Co-addition** **OK**
- Firmware** **OK**

Security

Horizon MB™ software can be used in CFR 21 Part 11 compliant and other regulated environments. Access levels are controlled, electronic signatures can be implemented and event logging can be used to trace all data manipulation.

Scripting Tools Window Help

Script Editor **Ctrl+Shift+E**

Record Script **Ctrl+D**

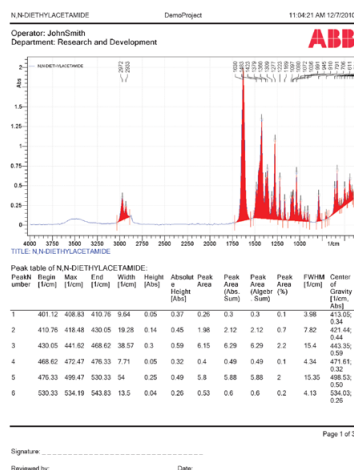
Pause Recording Script

Run Recorded Script **Ctrl+G**

Edit Recorded Script

Scripting

Use the script editor to record you own scripts, making a sequence of operations available in a single click.



Reporting

You can fully customize reports using the print layout manager. Create your own or simply modify one of the many templates provided with the software.

Horizon MB™ FTIR Modules

STANDARD PACKAGE

Horizon MB™ FTIR

Intuitive software for daily operation.

The Horizon MB™ FTIR module facilitates the acquisition, processing and analysis of samples. With Horizon MB™ FTIR, managing analytical results has never been easier.

HORIZON MB™ FTIR OPTIONAL MODULES

Horizon MB™ Professional

Advanced features for demanding users

The Horizon MB™ Professional module includes enhanced mathematical functions, 3D capabilities and extended import/export functions. It also includes a regulatory module for automated execution and reporting of the instrument verification tests described in the ASTM and the pharmacopoeia guidelines.

Horizon MB™ Library

A powerful search engine

The Horizon MB™ Library module is designed for efficient multiple library searches. It offers spectrum and full-text search capabilities with custom and commercial libraries. It also supports the most common commercial library formats.

Horizon MB™ IR Interpretation

Easy identification of functional groups

The Horizon MB™ IR Interpretation module is used to analyze IR spectra and easily identify functional groups using the IR interpretation rule database.

Horizon MB™ Quantify

The modern chemometrics toolbox

The Horizon MB™ Quantify module incorporates univariate and multivariate algorithms (like PLS and MLR) for data analysis and quantification. It also includes the Horizon MB™ Professional module.

Horizon MB™ Security

Enabling 21 CFR Part 11 compliance

The Horizon MB™ Security module allows you to use your existing windows login or create a new one. It provides access control to software functions based on a permission scheme, hierarchical access control is based on data access roles. It includes electronic signatures, activity logging and traceability of all data manipulations.

Horizon MB™ Scripting

Create your own functions

The Horizon MB™ Scripting module enables users to develop their own routines and functions using the script recorder or writing code directly for the SAX basic scripting engine.

Minimum Requirements

Hardware

- Minimum 2GB of RAM required
- (4GB recommended)
- Minimum 80 GB of hard disk
- Intel Pentium or newer x86 CPU.
- Ethernet connection
- 1024x768 or better resolution with at least 256 color support
- DVD reader

Software – US English Windows®

- Windows® 7 - 64 bit edition recommended
- Windows XP Service Pack 3, Windows Vista Service Pack 1 and Windows 7 - 32 bit edition supported

ABB Analytical is one of the major ABB manufacturing facilities for laboratory and process analytical systems with more than 35 years of experience in developing FT-IR and FT-NIR spectrometers for industrial, military and space applications. As part of our portfolio of products and services for process optimization, we are able to offer a full range of custom calibration modeling services and application support for industrial applications.

ABB also provides extensive, globally distributed after-sales support and engineering services, as well as a full customer training program.

IR & NIR Spectroscopy Knowledge Management

- Application support and spectroscopy training
- Calibration and chemometrics development training
- On-site services including hardware and calibration maintenance

Up-Time Insurance Program

- Preventive maintenance
- Extended warranty services
- Tailor-made service contracts
- Chemometrics services
- Installations / Start-ups & Analyzer Life Cycle Program
- Process spectrometer start-ups
- Laboratory spectrometer installations
- Spectrometer and laboratory / process software exchanges / upgrades
- Extended process and lab spectrometer warranties

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Sales



Service