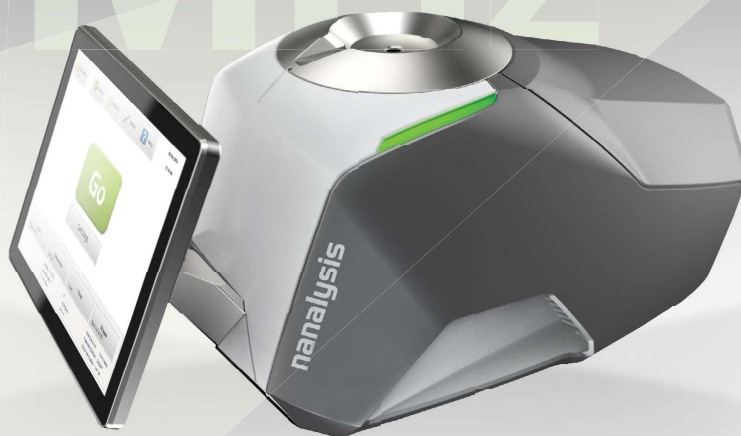


# 100 MHz

## Benchtop NMR



250110



SEE THE DIFFERENCE.

Find out more at [nanalysis.com](https://nanalysis.com) | [sales@nanalysis.com](mailto:sales@nanalysis.com) | 1-855-667-3239



### Superior Resolution

The highest field on the market, the Nanalysis 100 allows you to extract more information from your spectrum with better peak dispersion and resolution.



### Rapid Results

Discover how high-performance benchtop NMR located directly in your lab can improve your productivity!



### Low Maintenance

With no required cryogenes, these permanent magnet NMR spectrometers can significantly reduce operating expenditures.



### Easy-to-Use

The instrument facilitates quick data collection and processing at any level, with an ergonomic display and an easy-to-use software interface.

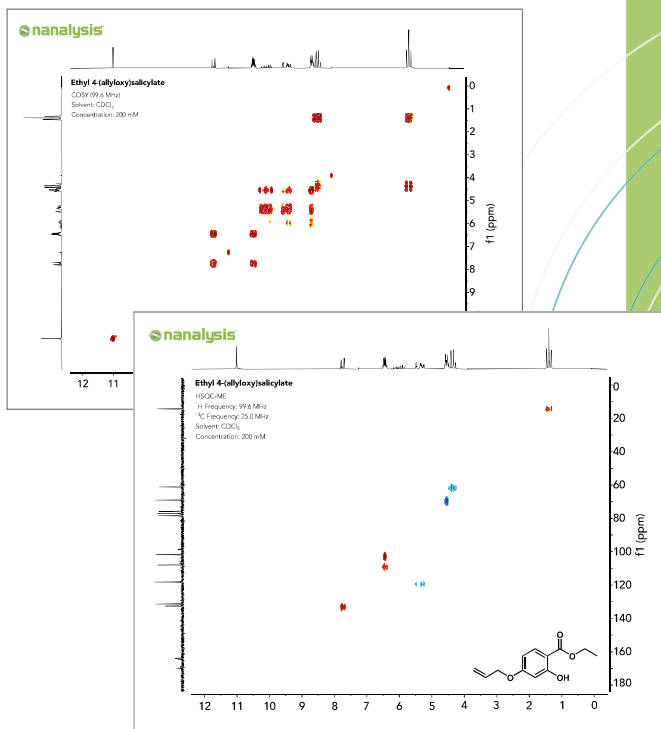


### Configurable

Advanced graphical pulse programming capabilities, the 100 MHz spectrometer allows the user to run experiments exactly as they want.

Quick and Easy-to-use

Configure  
Acquire  
Analyze



### Design Pulse Sequences

Our advanced SPINit software allows users to modify existing pulse sequences, or to write their own via an easy-to-use graphical interface that generates pulse programs without requiring the user to learn a coding language.

### Queue Experiments

The queuing module allows the user to set up a series of experiments to be acquired automatically (e.g.,  $1D$ ,  $T_1$ ,  $T_2$ , COSY, TOCSY, JRES, DEPT, HSQC, HMBC, etc.).

Multi-nuclear Capability

Customizable Experience

Exceptional Performance

Quick and Easy-to-use

**100PRO**  
Multi-nuclear

Inquire about available nuclei configurations to enhance the utility of the 100 MHz for characterization of a broad range of natural and synthetic complexes. Observe a number of spin active nuclei including:  $^1H$ ,  $^7Li$ ,  $^{11}B$ ,  $^{13}C$ ,  $^{15}N$ ,  $^{19}F$ ,  $^{23}Na$ ,  $^{31}P$ ,  $^{129}Xe$ , etc.

### Powerful Benchtop NMR

## Why Nanalysis 100 MHz?

Easy-to-use, low-maintenance 100 MHz NMR improves productivity with rapid and accurate results. Acquire the NMR experiments you want and receive your results quickly and easily.

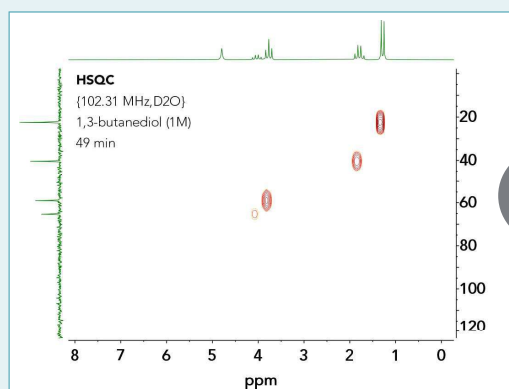
## Pulsed Field Gradients (PFGs)

### 1 Enhance solvent suppression routines

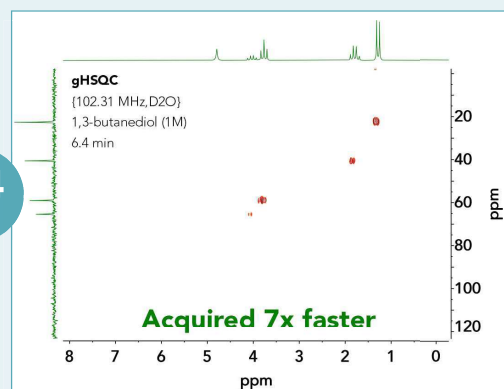
Solvent suppression routines are used to suppress strong signals, typically solvent, in the spectrum. Gradient-based approaches, such as WET, often yield a higher-quality suppression signal.

### 2 Speed up 2D NMR data acquisition

The advantage of using gradient-based pulse programs to acquire your 2D NMR spectra is that data can typically be acquired faster and with fewer artifacts than conventional sequences.



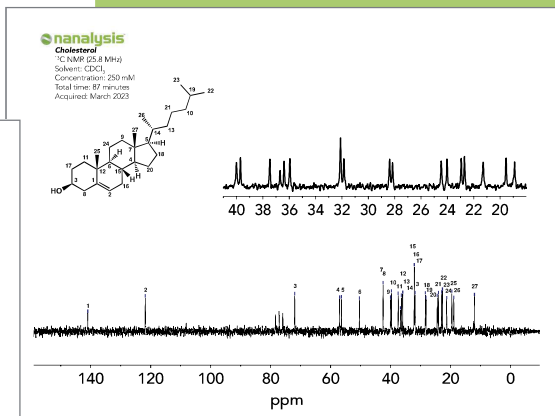
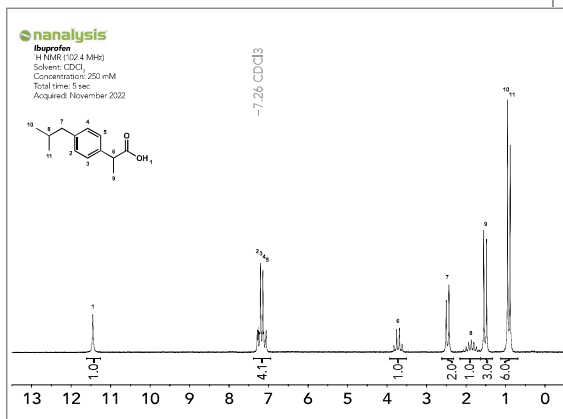
49 min → 6.4 min



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### Versatile User Interface

Acquisition parameters are easily modified by the user through the use of the ergonomic touchscreen, a keyboard and mouse, or through an external computer.

### Load Standard Experiments

**100PRO** – e.g.,  $^1\text{H}/^{19}\text{F}/^{13}\text{C}$ ,  $^1\text{H}/^{19}\text{F}/^{31}\text{P}$

The standard experiments for the  $^1\text{H}/^{19}\text{F}/^{13}\text{C}$  configuration include: 1D, 1D( $^1\text{H}$ ),  $T_1$ ,  $T_2$ , COSY, JRES, TOCSY, HSQC, DEPT, APT, HETCOR, HMBC, etc.

Please inquire about additional pulse sequences or the experiment designer.

**100e** –  $^1\text{H}/^{19}\text{F}$

1D,  $T_1$ ,  $T_2$ , COSY, JRES & TOCSY



**100e**  
( $^1\text{H} / ^{19}\text{F}$ )

## Technical Specifications

Operating Frequency  
**100 MHz (2.35 T)**

Magnet  
**Permanent, no cryogenics**

User Interface  
**Built-in touchscreen and remote access.  
Connectable to external computer  
if desired.**

Nuclei  
**100PRO**  
e.g.,  $^1\text{H}/^{19}\text{F}/^{13}\text{C}$ ,  $^1\text{H}/^{19}\text{F}/^{31}\text{P}$   
Please inquire about custom options.

**100e**  
 $^1\text{H}/^{19}\text{F}$

Lock  
**Internal  $^2\text{H}$**

Sample  
**Standard 5 mm NMR tubes**

Compatibility  
File: **JCAMP-DX and CSV**  
Software: **Mnova, ACD/Labs, Delta,  
TopSpin, MATLAB, SPINIt, NMRFX, etc.**

\* Specifications are subject to change without notice



Resolution  
**LW(50%) <0.5 Hz (<0.005 ppm)**

Sensitivity  
**>220 : 1**  
**(1% Ethylbenzene, 1 scan)**

Stray Field  
**2 Gauss line contained  
within enclosure**

Operating Temperature  
**18 – 26 °C**

Power Supply  
**100 – 240 VAC, 50 – 60 Hz**

Connectivity  
**Ethernet/WiFi, USB,  
Serial, HDMI**

Dimensions with screen (w x h x d)  
**17 x 15.25 x 32"**  
**43.2 x 38.74 x 81.28 cm**

Screen size and resolution  
**15.6", 16:9, 1920 x 1080**

Weight  
**243 lbs /110 kg**

## Available Experiments

1D
$T_1$
$T_2$
COSY
JRES
HSQC
HSQC-ME
DEPT
APT
HETCOR
TOCSY
Nutation
<b>Add-on packages</b> (kinetics, gradient-based experiment library, solvent suppression, extended experiment library)

Please inquire about additional pulse sequences or experiment designer.

## Connectivity



**Innovative Magnet Design**  
Highest field available, <2 G outside enclosure

**Sample Access Port**  
5 mm NMR tubes

**Progress Indicator**  
Large status light so you know when a scan is finished from across the room

**Ergonomic Display**  
State-of-the-art, external customizable screen for easy data acquisition and processing

**Quick Access**  
In addition to USB, ethernet, and WiFi connections in the rear; quick access USB ports and the power button are located at front



Ver. 2025-02