

100  
MHz

## Benchtop NMR



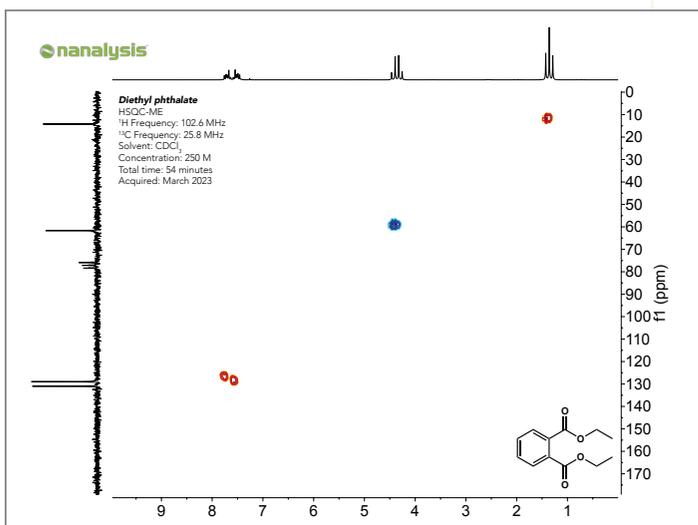
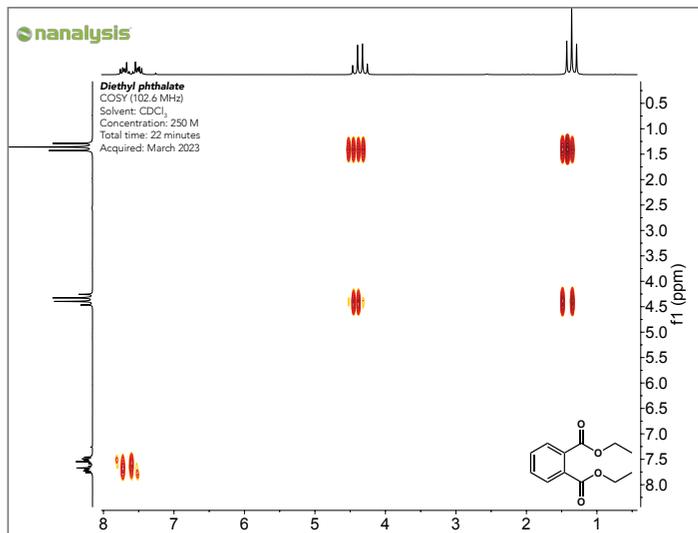
*Powerful Benchtop NMR*

## **Why Nanalysis 100 MHz?**

Easy-to-use, low maintenance 100 MHz NMR improves productivity and workflow with rapid, accurate results. Run the experiments you want and quickly receive the results you need with ease.



Talk to us about your benchtop NMR application | [sales@nanalysis.com](mailto:sales@nanalysis.com)



### 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.).

Single- or Multi-nuclear capability

Customizable Experience

Exceptional Performance

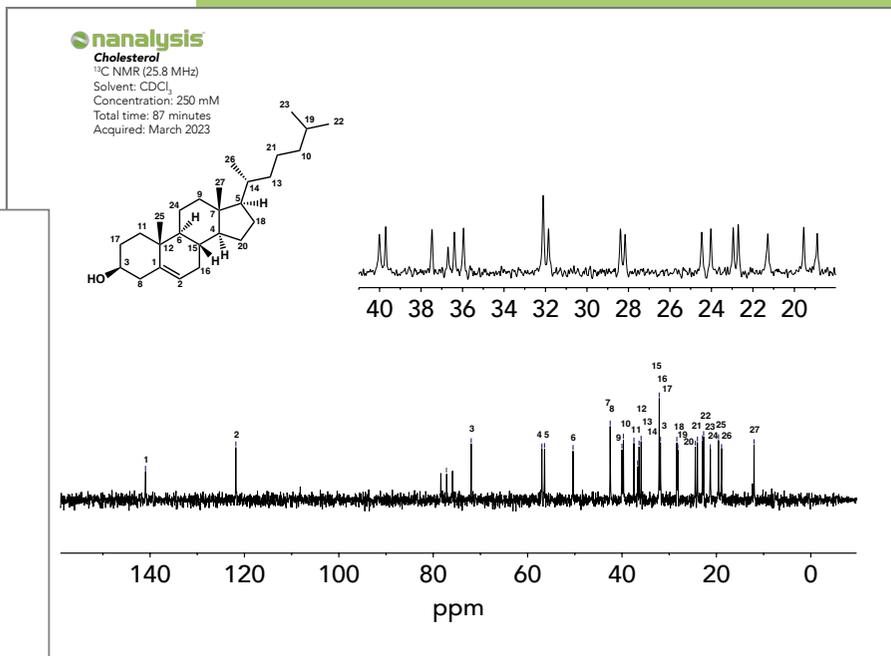
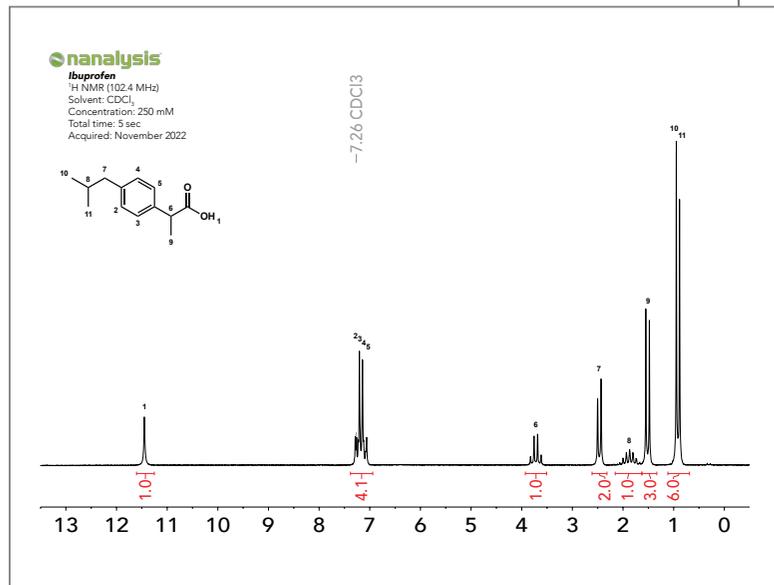
Quick and Easy-to-use



**100PRO**

(Two Nuclei)  
Dual Channel

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:  $^1\text{H}$ ,  $^7\text{Li}$ ,  $^{11}\text{B}$ ,  $^{13}\text{C}$ ,  $^{15}\text{N}$ ,  $^{19}\text{F}$ ,  $^{23}\text{Na}$ ,  $^{31}\text{P}$ ,  $^{129}\text{Xe}$ , etc.



### Versatile User Interface

Spectrometer settings are easily adjusted (configured) by the user, as it can be controlled through the ergonomic touchscreen, a keyboard and mouse, or through an external computer.

### Load Standard Experiments

**100PRO** – e.g., <sup>1</sup>H/<sup>13</sup>C, <sup>1</sup>H/<sup>31</sup>P, <sup>1</sup>H/<sup>19</sup>F

The standard experiments include 1D, T<sub>1</sub>, T<sub>2</sub>, COSY, JRES, TOCSY, HSQC, DEPT, APT, HETCOR, HMBC, etc.

*Please inquire about additional pulse sequences or Experiment Designer.*

**100e** – <sup>1</sup>H

1D, T<sub>1</sub>, T<sub>2</sub>, COSY, JRES & TOCSY



**100e**

(<sup>1</sup>H)  
 Single Channel

## Technical Specifications

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

Magnet  
**Permanent, no cryogens**

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

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

**100e – Single Channel;  $^1\text{H}$**   
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.**



Resolution  
**LW(50%) <0.7 Hz (<0.007 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
NOESY
ROESY
Nutation
Add-on packages (kinetics, solvent suppression)

Please inquire about additional pulse sequences or Experiment Designer.

## Connectivity



Ethernet  
Wi-Fi



Local Network  
Internet

- Shared Folder
- Network Printing
- Remote Control
- Live Help
- Monitoring
- Updates



### 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





### 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