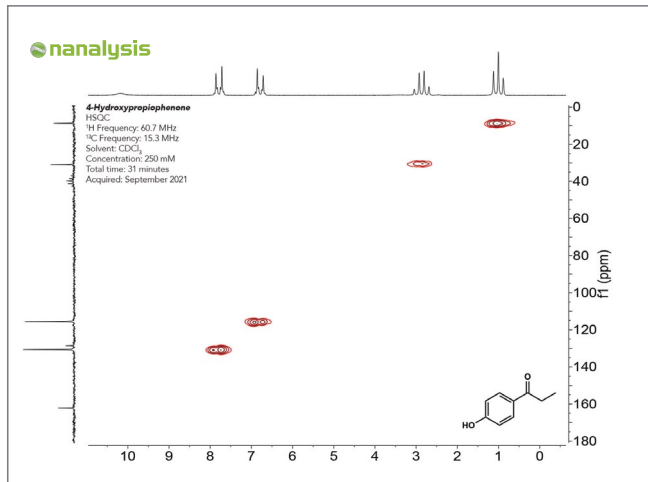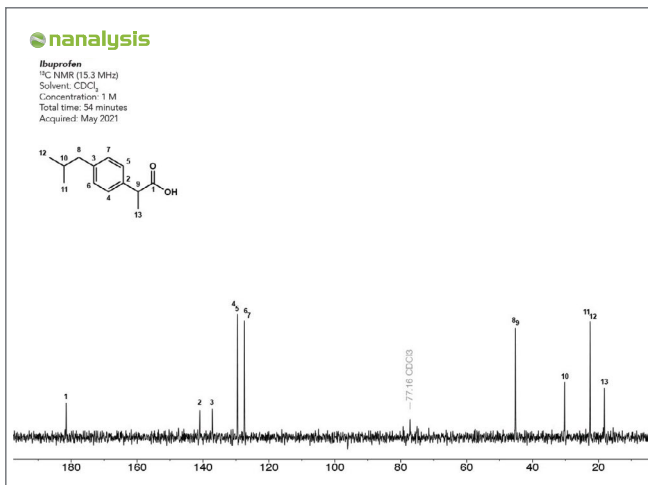# nanalysis™

60 MHz

Benchtop NMR

Our Flagship Benchtop NMR

Nanalysis 60 MHz

With the magnet, electronics and computer in a single enclosure, the 60 MHz is the best all-in-one benchtop NMR spectrometer in its class. Compact and high performance benchtop NMR making it resilient to the rigours of a busy laboratory.

Talk to us about your benchtop NMR application l sales@nanalysis.com

nanalysis

Ibuprofen
^{13}C NMR (15.3 MHz)
Solvent: $CDCl_3$
Concentration: 1 M
Total time: 54 minutes
Acquired: May 2021

~77.16 CDCl3

nanalysis

4-Hydroxypropiophenone
HSQC
^1H Frequency: 60.7 MHz
^{13}C Frequency: 15.3 MHz
Solvent: $CDCl_3$
Concentration: 250 mM
Total time: 31 minutes
Acquired: September 2021

f1 (ppm)

System Validation

Nanalysis offers an optional software package for Installation Qualification (IQ) and Operational Qualification (OQ) to meet GxP requirements. Our IQ/OQ protocol provides data quality and integrity assurance in a simple one-click fashion, giving users quick access to a detailed report of spectrometer performance.
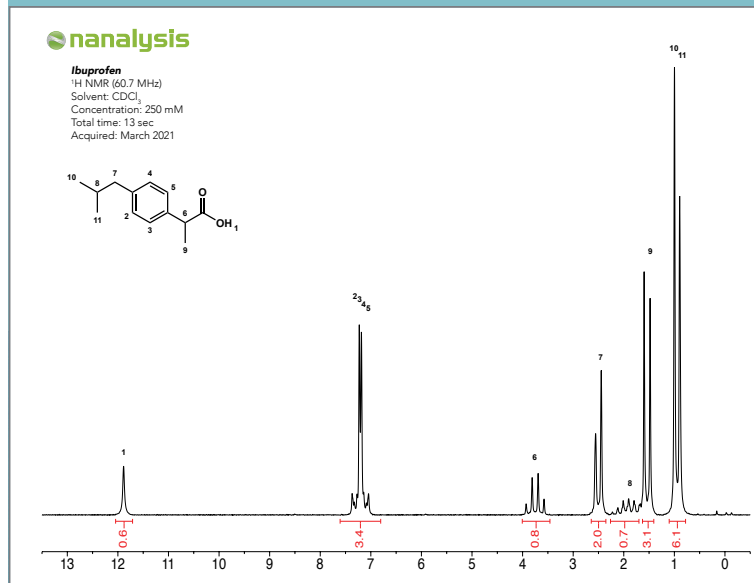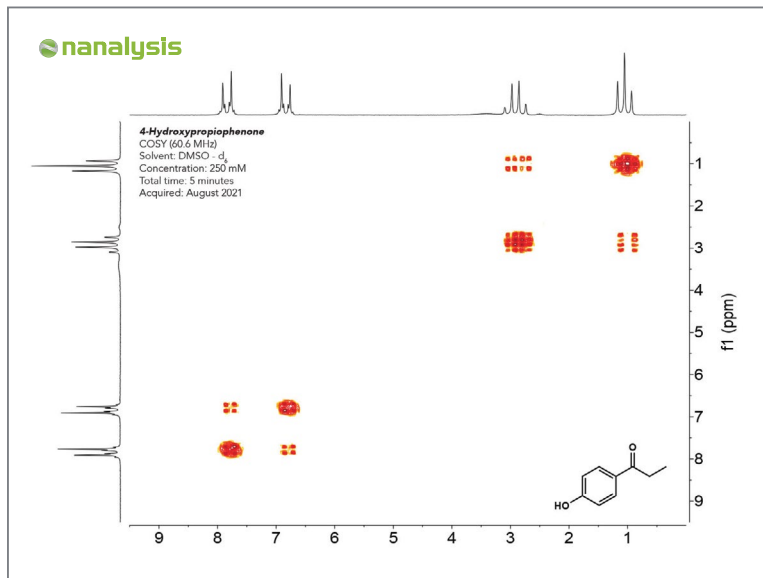
Queue Experiments

Our queuing module allows the user to set up a series of experiments to be acquired automatically (*e.g.*, 1D ^1H, COSY, HSQC, 1D $^{13}C\{^1H\}$).

ENERGY EFFICIENT
MULTINUCLEAR CAPABILITIES
HIGH PERFORMANCE
LOW MAINTENANCE
SIMPLE REACTION MONITORING
ACCESSIBLE
AUTOMATABLE
COMPACT AND
AFFOR
CONVENTION

60PRO

Multi Nuclear

Inquire about available nuclei configurations to enhance the utility of the 60 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, etc.

4-Hydroxypropiophenone
COSY (60.6 MHz)
Solvent: DMSO - d6
Concentration: 250 mM
Total time: 5 minutes
Acquired: August 2021

Ibuprofen
¹H NMR (60.7 MHz)
Solvent: CDCl₃
Concentration: 250 mM
Total time: 13 sec
Acquired: March 2021

Low Maintenance and Easy-to-use

Built-in touchsceen, convenient automated and standby shimming routines ensure that the instrument is always ready for use.

Load Standard Experiments

60PRO – *e.g.,* **¹H/¹⁹F/¹³C, ¹H/¹⁹F/³¹P, ¹H/¹⁹F/¹¹B, etc.**
The standard experiments include 1D, T_1, T_2, COSY, JRES, HSQC, DEPT, APT, HETCOR, etc. Please inquire about additional pulse sequences
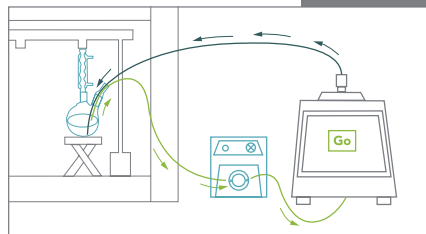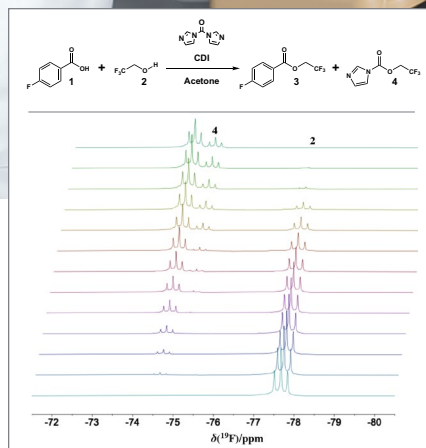
60e – **¹H/¹⁹F**
1D, T_1, T_2, COSY, JRES

60e

Single Channel

> Simple operation
> Accurate, precise, repeatable
> Quick data collection

Simple Reaction Monitoring

NMReady-flow cell kit

The NMReady-flow allows easy interconversion of any 60e or 60PRO benchtop spectrometer into an NMR online detector either as a stand-alone tool or in conjunction with other analytical techniques.

For more information, visit
nanalysis.com/nmready-flow

NMReady-flow allows users to:

» Understand and optimize chemical reactions in real time

» Improve reaction yield

» Automate repeated syntheses

» Integrate the 60 MHz benchtop NMR spectrometer in a centralized laboratory system

* Illustration for demonstration purposes only

If you would like further information about any of the optional software, accessories and service packages, please contact

▶ **sales@nanalysis.com**

Technical Specifications

60e **60PRO**

Operating Frequency
60 MHz (1.40 T)

Magnet
Permanent, no cryogens

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

Nuclei
60PRO – Dual-Channel

e.g., $^1H/^{19}F/^{13}C$, $^1H/^{19}F/^{31}P$

Please inquire about custom options

60e – Single-Channel; $^1H/^{19}F$

Lock
Internal ^1H and ^2H options

Sample
Standard 5 mm NMR tubes, flow options

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

Resolution
LW(50%) <1.0 Hz (<0.017 ppm)

Sensitivity
**100 : 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*)
**11.8 x 11 x 19.2"
30 x 28 x 49 cm**

Weight
58 lbs / 26.3 kg

Available Experiments

1D
T_1
T_2
COSY
JRES
DEPT
APT
HSQC
HETCOR
TOCSY
Nutation
Add-on packages (kinetics, solvent suppression)

Please inquire about additional pulse sequences.

* Specifications are subject to change without notice

Robust, Compact, Portable
All-in-one compact benchtop NMR, easy-to-site anywhere making hands-on access simple.

Rapid Results
Discover how a high-performance benchtop NMR located directly on your bench can improve your productivity!

Low Maintenance
Reduce operating expenditures with permanent magnet NMR spectrometers that require no cryogens, no preventative maintenance, or weekly servicing.

Configurable
Run standard acquisition parameters from a convenient pop-up menu and modify as desired to get the results you want.

Quick and Easy-to-use
With a simple but modifiable interface controlled by touchscreen, keyboard/mouse or external computer, data can be acquired easily by the user.

Quick and Easy-to-use

Configure
Acquire
Analyze

nanalysis™