High-performance
Benchtop NMR Spectrometers

Benchtop NMR spectrometers have proven efficacy in rapid and accurate quantification of **THC** and/or **CBD** content in trim, buds, or concentrates of hemp or cannabis. With compact *60 MHz* and *100 MHz* benchtop NMR platforms, sampling accessories, quantitative and a highly connective software interfaces, users can incorporate automated NMR into routine QA/QC processes.
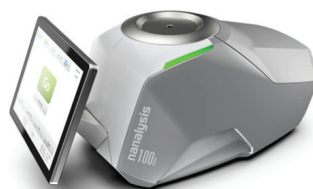
Contact us for more information.

Cannabis

Rapid THC & CBD determination

— **Award Winning** —
BEST NEW ANALYTICAL
PRODUCT

NEW 100e

(¹H) Single-Nucleus
100 MHz

60e

(¹H) Single-Nucleus
60 MHz

Why **benchtop** NMR for THC and CBD determination?

Reduce operating expenditures

Drastically reduce consumable and waste disposal costs by eliminating the use of large-volume of expensive, high-purity solvents.

Rapid results

No required calibration standard and measurement times that are less than one-third of the time required with traditional chromatography methods.

Simple sample preparation

Easy, repeatable, and operator independent, sample preparation that does not require making cumbersome dilution series.

Accuracy

Build customer trust by providing your customer with reliable, repeatable.

Automated procedure

With an autosampler and an easy-to-use interface that can be customized for data acquisition and processing by technicians.

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High-performance **benchtop** NMR spectrometers

- **High quality ¹H NMR Spectra**
- **Easy-to-use**
- **Automatable** – processing and data analysis
- **Maintain data integrity** – accessible and secure data
- **Easy connectivity**
- **Low maintenance**

Increasing CBD

Increasing THC

CBD

THC

	%w/w THC			%w/w CBD		
	Benchtop NMR*	HPLC*	%diff	Benchtop NMR	HPLC	%diff
Sample 1	81.3 (0.7)	81.8 (1.4)	0.6	–**	<1	n/a
Sample 2	–**	3.0 (0.1)	n/a	55.4 (3.7)	57.0 (1.1)	2.8
Sample 3	25.4 (2.0)	22.6 (0.8)	11.0	57.6 (2.3)	58.3 (1.8)	1.2
Sample 4	47.7 (3.7)	46.4 (0.6)	2.7	40.0 (0.6)	41.1 (0.8)	2.7
Sample 5	61.6 (1.9)	61.1 (1.5)	0.8	27.6 (0.6)	25.1 (0.9)	9.1

*The experimental values are an average of three separate measurements.
**Below limit of quantification (LOQ)

This table summarizes the results obtained with the NMReady-60 and shows the excellent correlation between the data collected with the benchtop NMR and HPLC. The figure beside the table shows the proton spectrum of Sample 4.

Inquire for more information about Cannabinoid content, optional automation, and other tools. **sales@nanalysis.com**

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