

Sept. 15th 2021

Announcement of a **NEW** TD-NMR Spectrometer

Resonance Systems GmbH
Technologiepark Nabern, Germany

Today we want to present the result of our latest development:

SPIN MATE



We have been putting our new TD-NMR system [Spin Mate](#) through its paces since the beginning of this year. All tests were passed with excellent results. The [Spin Mate](#) system is very compact, robust and everything is in one housing.

The signal quality is excellent and forms the basis for many existing and future applications. In addition, the [Spin Mate](#) is very easy and intuitive to use and, thanks to its very attractive pricing, is the entry point into the world of professional quality assurance with TD-NMR.

On the basis of our decades of experience, we continuously develop new apps, also in close cooperation with our customers.

[Spin Mate](#) thus also offers the key for integration in customer solutions and for online process control purposes due to its feature "ready for automation".

The [Spin Mate](#) also provides the basis for future products in teaching and training. We will keep you informed about this.

Special Offer

For your orders up to and including December 31st 2021, we offer our selected customers the new [Spin Mate](#) for a special price!!! The official product launch will be on April 1st 2022.

- The core of [Spin Mate](#) is based on our well established Spin Track analyzer and supports a great variety of standard NMR routines.
- The technology used has been successfully approved in food, oil, fuel and polymer industries for routine analysis.
- Due to its compact size combined with its excellent performance, [Spin Mate](#) provides the basis for many applications, scientific investigations, teaching and training purposes. [Spin Mate](#) is the solution when it comes to automation.

Supported applications include: Relaxation times measurement, Surface Area and Wettability of nano-particles and colloidal systems, Crystallinity and Domain Sizes in Polymers and many others, including either free-script or preinstalled pulse sequences:

- FID Free Induction Decay
- SE Solid Echo
- MSE Magic Sandwich Echo
- HEC Hahn Echo Decay
- CPMG Carr-Purcell-Meiboom-Gill
- SE-CPMG Combined Solid Echo - CPMG
- FID-CPMG Combined FID - CPMG
- FastT1 one passage T₁ measurements for liquid samples
- IR Inversion-Recovery T₁ curve
- DQ-Built-Up Double Quantum built-up curve
- DQ-Filter Spin Diffusion measurements
- Goldman-Shen Spin Diffusion measurements

Technical Specifications

Hardware	¹ H Frequency: 18 MHz PC connection: High Speed USB 2.0 Total gain: 90 dB Noise figure: < 1.5 dB Ringing time for complete system: < 8 μs Maximal 90-degree pulse duration: 3 μs
Power requirements	100..240 VAC, 50..60 Hz
Relax8 software	Pulse sequence: Fully programmable cycles, events, durations, phase shifts Supported OS: Windows 7, 8, 10 Data compatibility: ANSI Values Columns, Microsoft Excel®
Dimensions	300x174x172 mm
Weight	16 kg
Power consumption	Max. 100 W
Tube diameter	5 or 10 mm on demand

Please feel free to contact us for more detailed information about available advanced options and their specifications