## Magno/Meter XRS

A POWERFUL ADVANCEMENT IN PARTICLE CHARACTERIZATION AND SURFACE ANALYSIS OF DISPERSIONS



### Innovative and versatile



### Separate magnet/probe assembly pod

Easily exchangeable for different nuclei (7Li, 19F, 31P), and features remote operation for use in hazardous environments



### Highly-customizable pulse sequencing

Phase cycling, composite pulses, two channel RF, and 3D shaped gradients



### **Uses regular length NMR tubes**

Four diameters available, from 2 mm (highest resolution) to 10 mm (lowest resolution)



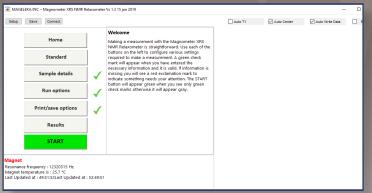
### Simple & intuitive software

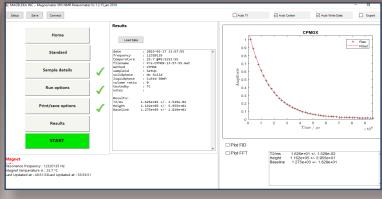
Easy to use and upgrade, with dedicated dual-core ARM9 processor running Debian

## Unparalleled Analysis Unmatched Functionality & Performance

### All industrially relevant concentrations

- Solid-liquid ratio
- Highly paramagnetic species
- Polymers solutions and melts
- Wetted surface area
- Nanoparticle kinetic processes
- Surfactant and polymer absorption





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### Specifications & Advantages



- Remote operation for use in hazardous and sensitive environments
- Field strength range: 10 MHz 15 MHz for increased sensitivity
- · Flow-through modification\*

## Highly-customizable, user-selectable pulse sequencing

- Phase cycling, composite pulses, two-channel RF and 3D shaped gradients
- Robust self-diffusion measurement\* from water to viscous liquids: 10<sup>-9</sup> - 10-<sup>13</sup> m<sup>2</sup>s<sup>-1</sup>
- · Droplet sizing analysis\*
- Polymer characterization in solution and melts\* (through hydrodynamic radius)
- · 1D, 2D and 3D imaging\*
- Customizable by software pulse programming interface\*

### Powerful Magno Soft software

- Based on a dedicated dual-core ARM9 processor running Debian
- Easily upgradeable and flexible by direct Ethernet access

### Programable temperature control

 Optional upgrade to a wider continuous range of 10 °C – 80 °C

### Magno Pod is easily exchangeable

 Different nuclei (7Li, 19F, 31P) use convenient separate pods

### Shorter RF pulses

- 90° pulse of < 5 μs</li>
- · Measurement of solid materials\*
- Useful for highly paramagnetic samples
- · Direct measure of the solid/liquid ratio

## Works with four different size OD regular NMR tubes

- 2 mm (highest resolution), 4 mm (standard resolution), 8 mm (lower resolution) and 10 mm (lowest resolution)
- Resolution: 200 ppm (or better) with 4 mm tube\*\*
- Access to customized pulse sequence library and analysis software
- Access to expert advice on all aspects of NMR and its applications
  - \* In development
  - \*\* Depending on choice of magnet

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