The compact and affordable Thermo Scientific™ picoSpin™ Series II spectrometers bring the quantitative and qualitative power of Nuclear Magnetic Resonance (NMR) spectroscopy to your benchtop, giving you the ability to monitor reactions, and confirm product structure when and where you need to.

The superior resolution of the picoSpin 80’s 2 Tesla, temperature controlled permanent magnet reveals chemical information obscured by lower field NMR instruments without the expensive consumables, cryogens, or environmental controls needed by other spectrometers.

Thermo Scientific picoSpin Series II NMR Spectrometers

NMR spectra right on your benchtop

Unlike other NMR spectrometers, the picoSpin Series II has a completely redesigned software interface is simple enough for students without sacrificing the flexibility experienced users demand. Four times faster hardware and user customized methods save you time and increase sample throughput. The picoSpin Series II robust, patented, capillary cartridge will last for years and only requires 40 microliters of sample, greatly reducing consumable, sample, and solvent costs without compromising reliability or performance. Additionally, it’s now available with a Luer-lok needless syringe for improved safety and ease of use.

The picoSpin Series II NMR spectrometers are available in two different field strengths to fit your needs. Choose the picoSpin 80 where superior sensitivity and resolution are needed or the picoSpin 45 when bench space is at a premium. The picoSpin Series II NMR spectrometers: bringing the power of NMR to your fingertips.
Product Specifications

Performance

- Larmor Frequency
  - 82 +/- 1 MHz Proton
  - 45 +/- 1 MHz Proton
- Chemical Shift Resolution
  - <20 ppb FWHM (80 MHz)
  - <40 ppb FWHM (45 MHz)

Magnet

- Temperature Stabilized Rare Earth Permanent
- 2 Tesla (82 MHz)
- 1.1 Tesla (45 MHz)

Capillary Cartridge

- PTFE, quartz, and 316 stainless steel capillary sample
- 400 µm capillary ID
- 40 µL sample volume
- 1/16” interface fittings
- User Replaceable

Sample

- Sample Type
  - Liquid
- Sample Introduction Method
  - Syringe, blunt needle or needleless

Environmental

- No Cryogens or Compressed Gases
- Standard Laboratory Environment

Interface

- Ethernet
  - Direct Connection or LAN
- Embedded Web Server

Software/Collect

- Web Browser User Interface
- Data Export
  - JCAMP-DX
    - Readily opened by many NMR programs
- Data Analysis Software
  - Mestrelab Mnova™ NMR Software
    - One Year License

Dimensions

- picoSpin 45
  - Size: 17.78 cm x 14.61 cm x 29.21 cm
    (7” x 5.75” x 11.5”)
  - Weight: 5 kg (10.5 lbs)
- picoSpin 80
  - Size: 43.18 cm x 35.56 cm x 25.4 cm
    (17” x 14” x 10”)
  - Weight: 19 kg (43 lbs)

Electrical Requirements

- 100-230 VAC, 50/60 Hz, 150 W