



Agilent 400 MHz NMR Magnet

Premium Shielded performance

Data Sheet



Introduction

The Agilent 400 MHz NMR magnet, with its Premium Shielded design, is the result of continuous refinement of the SUPERSCREENED technology and delivers valuable benefits for high resolution NMR Systems.

Key Benefits

- Significant reduction in fringe field over standard shielded magnets
- Minimized laboratory space requirement and minimized impact on rooms above or below the magnets
- Outstanding homogeneity



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The Agilent 400 MHz NMR system consists of a highly homogeneous superconducting magnet (400 MHz 1H, 9.4 Tesla), housed within an ultra low-loss helium cryostat with a nominal room-temperature bore of 54 mm.

The magnet features excellent fringe field characteristics, improved magnet shielding from external perturbations and minimized ceiling height. These facilitate ease of system siting as well as improving operational safety.

Scope of Supply

- Main magnet housed within a low loss cryostat
- Set of anti-vibration legs
- Liquid helium and nitrogen cryogen level probes and readout unit
- Liquid helium transfer siphon and extension tube
- Braided liquid nitrogen transfer line
- Room temperature shim set
- Helium and nitrogen gas flow meters

Technical Specifications

NMR frequency	400 MHz
Drift	8 Hz/hr
Superconducting shim coils	Z ¹ , Z ² , Z ³ , X, Y, ZX, ZY, XY, X ² -Y ²
Radial 5 G stray field from magnet center	55 cm/21.7 in
Axial 5 G stray field from magnet center	100 cm/39.4 in
Magnet radius (including flanges)	43 cm/16.9 in
Axial 5 G height above floor	208 cm/81.9 in
Axial 5 G depth below floor	N/A
System weight, operational	630 kg/1390 lbs
Vibration isolation using pneumatic legs	Included as standard
Minimum ceiling height	294 cm/115.7 in
Minimum ceiling height (optional transfer)	261 cm/102.6 in
Liquid helium refill volume	95 L
Liquid helium hold time	270 days (9 months)
Liquid nitrogen refill volume	58 L
Liquid nitrogen hold time	14 days

*Annual Refill option available which only requires one helium refill every 365 days.

Ordering Information, Separate Sale

Description	Part number
Agilent NMR Magnet, 400 MHz, 54 mm Bore Premium shielded performance for minimal stray field and reduced perturbations from external interferences.	0191756800

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Product specifications and descriptions in this document are subject to change without notice.

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