

Varian 700 MHz NMR Magnet

PREMIUM SHIELDED PERFORMANCE

NOTICE: This document contains references to Varian. Please note that Varian, Inc. is now part of Agilent Technologies. For more information, go to www.agilent.com/chem.



The Varian 700 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. The technology was pioneered by Magnex Scientific, Ltd., a wholly owned subsidiary of Varian, Inc.

- ▶ Significant reduction in fringe field over standard magnets minimizes space requirement and impact on surrounding areas
- ▶ Minimized ceiling height requirements allow easier siting

Varian 700 MHz NMR Magnet

Varian 700 MHz NMR Magnet

The Varian 700 MHz NMR system consists of a highly homogeneous superconducting magnet (700 MHz ^1H , 16.4 Tesla), housed within an ultra low-loss helium cryostat with a nominal room-temperature bore of 54 mm.

Specifications

NMR frequency	700 MHz
Drift	10 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	150 cm/59.1 in.
Magnet radius (including flanges)	51 cm/20.1 in.
Axial 5 G height above floor	350 cm/137.8 in.
Axial 5 G depth below floor	110 cm/43.3 in.
System weight, operational	2,000 kg/4,400 lbs
Vibration isolation using pneumatic legs	Included as standard
Minimum ceiling height	355 cm/139.8 in.
Minimum ceiling height (optional transfer)	330 cm/129.9 in.
Liquid helium refill volume	135 L
Liquid helium hold time	150 days
Liquid nitrogen refill volume	160 L
Liquid nitrogen hold time	21 days

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

System Includes:

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

Ordering Information, separate sale

Description	Part Number
Varian NMR Magnet System, 700 MHz, 54-mm bore	0191756900

Varian, Inc.
www.varianinc.com
North America: 800.926.3000, 925.939.2400
Europe The Netherlands: 31.118.67.1000
Asia Pacific Australia: 613.9560.7133
Latin America Brazil: 55.11.3238.0400

Other sales offices and dealers throughout the world—
check our Web site.