

# NMR SOLENOID MAGNETS



- Cryogen free
- 200, 400, 800 MHz
- 54 mm customer bore
- Compact design
- Low fringe field
- Vibration tolerant
- Easy to site

## Applications

- High resolution spectroscopy
- Reaction monitoring
- Online and inline QA & QC
- Laboratory, factory, fume cupboard, it's your choice

## Performance and versatility

- Magnets available at 200, 400 and 800 MHz
- Standard customer bore size
- Compatible with standard NMR accessories
- Fast ramp to field
- Fast cool-down
- Integrated, low-vibration cold head

## Easy to use

- Mobile capability
- Automated cool-down and ramping
- No cryogen refills
- No specialist training required

## Easy to site

- Small fringe field
- No ceiling height constraints
- No liquid-helium filling constraints
- Vibration tolerant, no vibration dampers
- Remote location of PSU and compressor if required



**HTS-110**  
1B Quadrant Drive, Waiwhetu  
Lower Hutt 5010, New Zealand

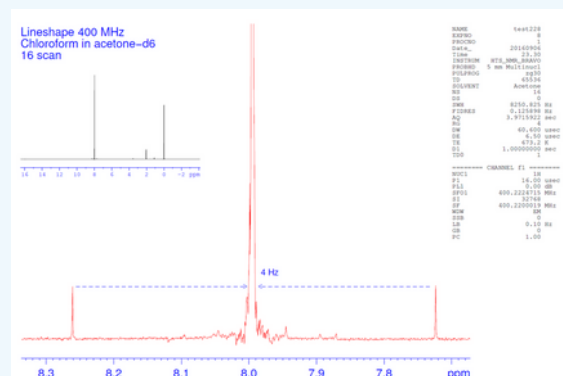
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## Standard system includes

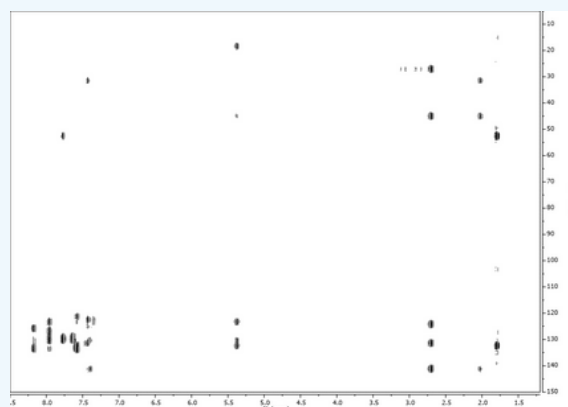
- Magnet subsystem with integrated low vibration, zero maintenance pulse tube cold-head
- 19" rack mounted compressor and power supply
- Active magnet protection electronics linked to integrated temperature sensors and voltage taps
- On-magnet energy-dump system
- 1 year warranty



Chloroform lineshape sample for the 400 MHz magnet

## Site Requirements

- <6 litres water per minute cooling supply
- 50/60Hz, 3P, 4-8kW electrical power
- User serviceable adsorber change on compressor every 20,000 hours
- Vacuum pump for initial installation and servicing only



2D 1H-13C HMBC experiment (HMBC=heteronuclear multiple bond correlation), requiring excellent temporal stability over the acquisition time of ~1hr

Model	Magnetic field (1H MHz)	Bore size (mm)	5 Gauss line (mm) Axial/Radial	Uniformity (ppm) *	Solenoid height (mm)	Solenoid dia. (mm)
MR 4T7-54	200	54	<100/50	<5	400	414
MR 9T4-54	400	54	<200/100	<5	655	550

\*Bare magnet uniformity after passive shimming, ready for standard electric shim set



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