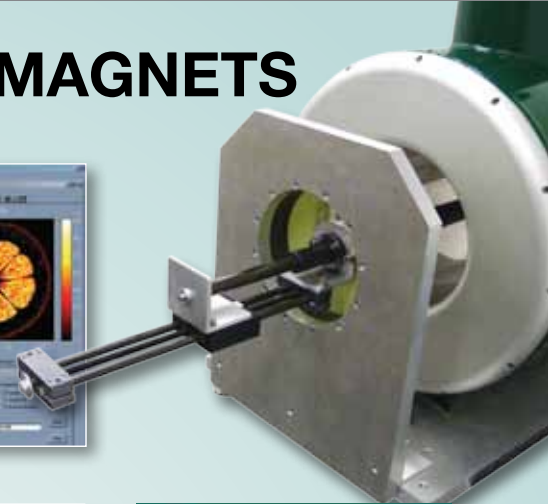
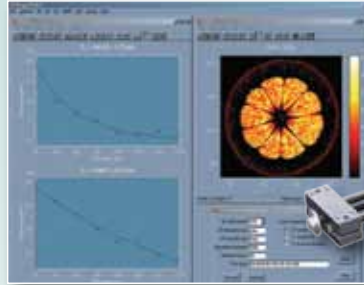
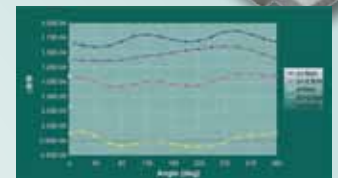


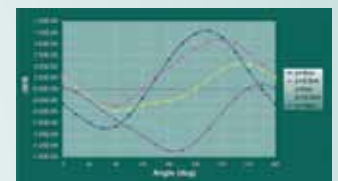
MINI 1.5T CRYOGEN-FREE MRI MAGNETS



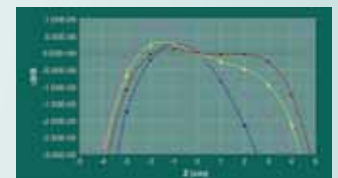
1.0 Tesla Cryogen-Free MRI Magnet Specifications	
Field	1.0 T
Current	30 A
Homogeneity	10 ppm over 8 cm dsv
Drift	0.1 ppm/hr
Bore	15 cm
Dimensions	330 mm OD 314 mm long 775 mm high
Cold-head cooling power	0.125 W at 4 k 5 W at 60 k
Compressor consumption	1 kW single phase
Maintenance	10,000 hours
Stray field	5 G at Z=1.6 m R=1.3 m



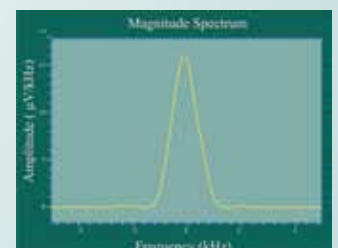
1.5 T MRI - Plots on cylinder after setting shims



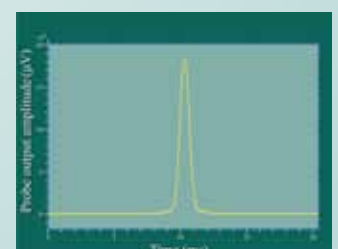
1.5 T MRI - Bare plot on cylinder



1.5 T MRI - Axial plots with and without shims



Lineshape measured with volume birdcage coil filled with 10cm diameter phantom



- Conduction-cooled magnets
- Persistent-mode switches and joints located in vacuum
- No liquid cryogenics
- No quench ducts
- Cool-down in a few days
- Compressors run off single or 3-phase electricity

Applications include:

- Pre-clinical imaging of small animals
- Wrist and knee imaging

1.5 Tesla Cryogen-Free MRI Magnet Specifications	
Field	1.5 T
Current	81 A
Homogeneity	5 ppm over 10 cm dsv
Drift	0.1 ppm/hr
Bore	26 cm
Dimensions	550 mm OD 535 mm long 1130 mm high
Cold-head cooling power	0.5 W at 4 k 30 W at 65 k
Compressor consumption	6.5 kW 3-phase
Maintenance	30,000 hours
Stray field	5 G at Z=3.1 m R=2.4 m