

Cryogen-free 3.0 T/360/AS horizontal bore magnet

Scientific Magnetics designs and manufactures superconducting magnet and cryogenic systems for academic and commercial research, particularly in the areas of fundamental physics, materials development and magnetic resonance. This 3 tesla horizontal bore magnet systems has high field stability, does not require any liquid cryogenes and can be installed virtually anywhere with electrical power.



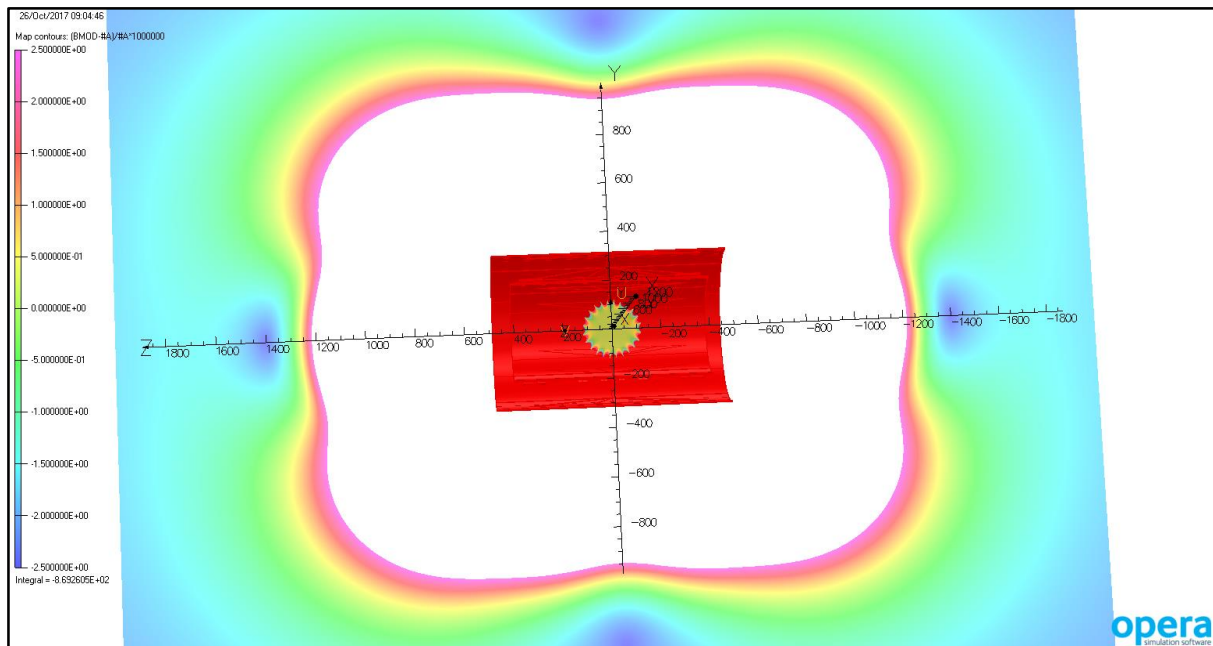
Features:

- 3 Tesla central field
- 360 mm clear bore
- No expensive liquid cryogenes
- No quench ducting required
- Inexpensive installation
- Safer operation
- Annual maintenance only
- Easier site planning
- Safe during power outages

Scientific Magnetics can design and prototype bespoke superconducting magnets and accompanying magnetic flux shields for niche MRI and industrial applications. Please contact us to discuss your requirements and obtain a quotation.

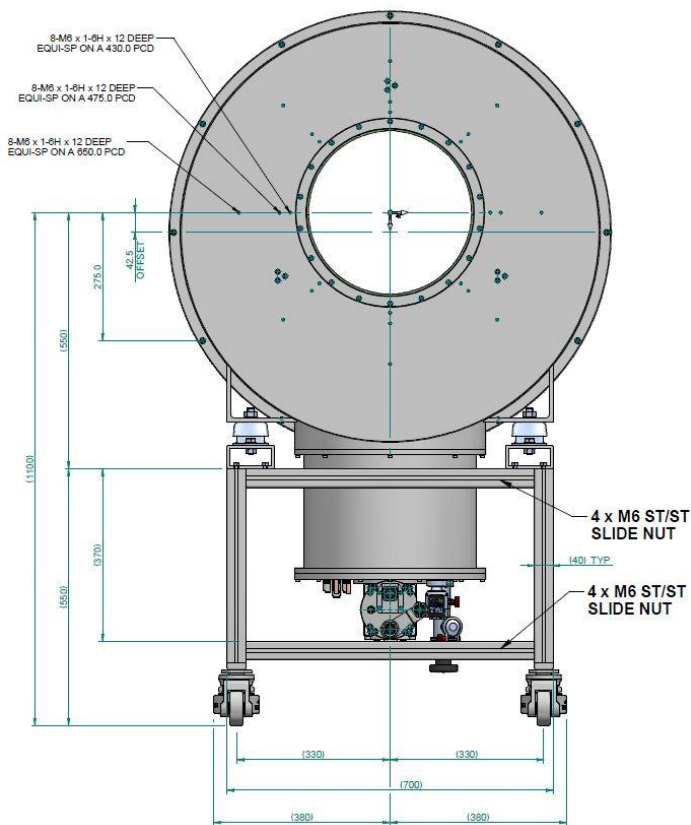
Summary of 3T360 magnet parameters

Parameter	Value
Magnet type	MRI
Bore orientation	Horizontal
Bore size	360 mm
Field strength	3 T
Maximum current	120 Amps
Residual field	< 0.5 mT
Homogeneity	+/- 2.5 ppm over FOV
Stability	< 0.1 ppm/hr
Field of view	Spherical, 180mm diameter
Cooling method	GM cryo-cooler (dry)
Fringe field	5G at < 1.5m axially and 1.3m radially
Ramp time	< 60 mins



Plot of 5G fringe field line for 3T360

Cryogen-free 3.0 T/360/AS horizontal bore magnet Key dimensions and interfaces



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