



# MTECH Laboratories, LLC

## B1 Series Magnet

### Data Sheet

The B1 magnet system is a state-of-the-art, precision-wound, air-core electromagnet with ultra high stability and homogeneity. This magnet is intended for NMR/MRI applications. The magnet is unusually compact with a very low diameter-to-height ratio. The homogeneous zone can be adjusted over a large range by adjusting shim currents. The open access enables a variety of applications including medical research, food inspection, and industrial applications. A variety of shim coils and gradient coils is available, depending on the application needs. The magnet is easy to site, requires no maintenance, refrigeration, or added utilities. The magnet power dissipates less than 600 watts, and is compatible with most academic labs or industrial sites. It occupies a relatively small footprint and, unlike permanent magnets, the B1 magnet can be shut down at any time for safety reasons. It is also relatively inexpensive and lightweight compared to iron core or permanent magnets. The key feature of this magnet is its low profile, which is unattainable by competing technologies.



B1 SERIES MODEL B1-A

### SPECIFICATIONS:

ACCESSIBLE BORE: 5.25 in. diameter  
by 2.3 in. high

STABILITY: 10 PPM/HR

HOMOGENEITY: Less than 25 ppm  
in 1 cm sphere (adjustable)

PROTON FREQUENCY: 1 MHz  
nominal (adjustable)

WEIGHT: 1000 LBS

SIZE: 34 in. by 34 in. by 40 in. high

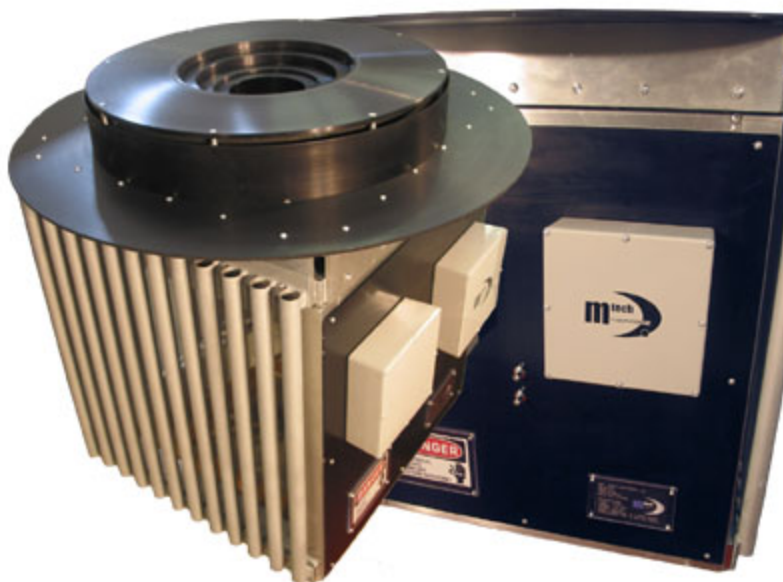
FIELD: 0.025 T

CURRENT: 1.57 A

VOLTAGE: 230 V(DC)

MAGNET TEMPERATURE: 23 C above ambient

STABILIZATION TIME: 12 hrs. (air cooled)



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