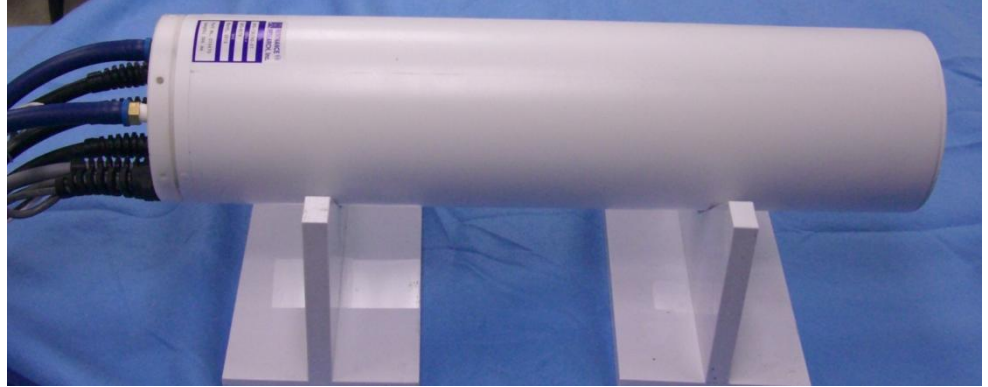


INTEGRATED GRADIENT AND SHIM COIL SYSTEM FOR SMALL ANIMAL MRI Model BFG-155/100-S6

Application in imaging of small rodents. Capable of high speed EPI and DWI.

System ready for insertion (mounting fixtures not shown)

Shielded Gradient Sub-System	
Gradient Strength	
125A Nominal	Up to 400 mT/m
Peak Values	
Peak Current	200A
Peak Voltage	700V
Rise Time	
100 A, 150 V	100 us
Gradient Strength Coefficient	
X axis	3.24 mT/m/A
Y axis	3.14 mT/m/A
Z axis	4.20 mT/m/A
Gradient coil inductance	
X axis	120 uH
Y axis	135 uH
Z axis	95 uH
Dimensions	
Internal Diameter	101.6 mm
External Diameter	157mm +/-1
Field linearity	
45 mm DSV	+/- 2%
75 mm DSV	+/- 10%
Shim Sub-system	
Shim Channel	Strength
Z0 (shielded)	2,100 Hz/A
Z2	1,030
ZX/ZY	405
C2/S2	278
Temperature monitoring	
Type	Number
PT-100	6
PTC	6



Construction Aspects

Materials
Oxygen free copper, fiber glass, epoxy resins
Cooling system
Forced water circulates in multi-path cooling circuits with independent feeds. Redundant temperature sensors ensure accurate temperature control. The whole system is impregnated with high thermal conductivity resin.
Cabling
Imagrad™ coaxial cables
Support fixtures
Compatible with standard magnet structures
Durability
Vacuum impregnated with resin for decreased vibration and increased durability

Field Linearity, X, Y, Z

