Resonance Instruments 8400 Specifications

Basic Performance

parameter	Model 8400
sensitivity (spins/G)	$5x10^{6}$
(spins/T)	$5x10^{10}$
resolution (G/cm)	0.07
(uT/cm)	7
frequency (GHz)	9.1 - 9.6
miniumum power (mW)	100

Cavity Resonantor

parameter	Model 8400
resonant mode	TE_{102}
unloaded Q-factor	5000
sample tube OD (mm)	5

Magnet

parameter	Model 8400
polepiece gap (mm)	14
maximum field strength (G)	7000
(mT)	700
field uniformity (G/cm^3)	0.01
(uT/cm^3)	1
field stability ($hour^{-1}$)	$1x10^{-5}$
modulation frequency (kHz)	100
maximum modulation amplitude (G)	10
(mT)	1
field setting resolution (G)	1
sweep width (G)	0 - 7000

sweep time (s)	30 - 3600
sweep resolution (bits)	12

Installation Requirements

parameter	Model 8400
dimensions (cmxcmxcm)	26x48x46
weight (kg)	50
power	single phase, 110/220/240 VAC, 50/60 Hz, 3A
cooling	not required below 4000 G; 0.25 liter/min otherwise
temperature (C)	10 - 50
computer	*Windows* 95 or *DOS* capable