

magneTherm—RC Software Control



This system includes dedicated software, allowing PC or Mac Control for automated resonance tuning, real time data display and graphing, control of fields strength and exposure times with an option for dual or single channel optical sensors for real time temperature sensing.

Product Code: NAN201006

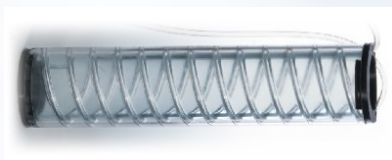
10 Standard Frequencies from 50kHz to 100kHz

Field Strength up to 25mT (250Gauss/20kA/m)

Single or Dual channel high resolution fiber optic signal conditioner and fibre optic temperature probes (2m) sensor with protected tip.

Power variation in real time

Excellent thermal insulation



Accessories for additional applications compatible with this system:

- In Vivo Water Jacket Option
- Live Cell Exposure Option with/without CO₂ & Temperature Control
- Large Format Coil and Water Jackets Options
- Drug Release/Delivery Option
- High Field Strength Option up to 50mT

System Specification:

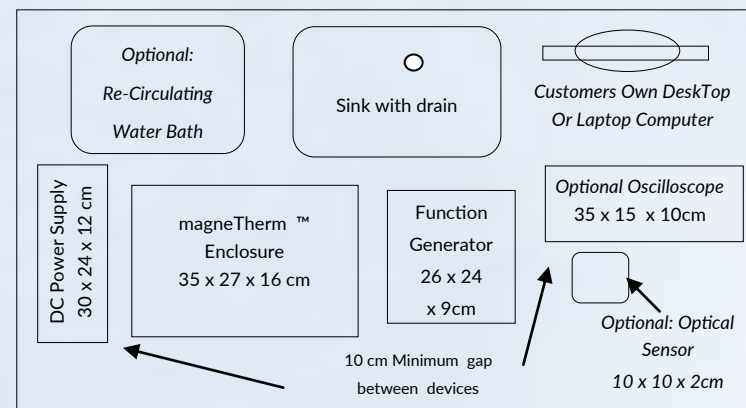
Intel, AMD or processor equivalent to industry standards with 1 GHz or faster.

Operating Systems: Windows 7, Windows 8, Windows 10,

1 GB RAM or more, 64/32 bit, 200 MB free hard disk space,

USB port – DVD-ROM drive

Magnetherm Footprint



Power Requirements

85-264 V AC 5A/115V AC 2.5A/230V AC Single Phase

Preferably 3 individually switched power sockets, (4 if option Oscilloscope is required), but non-switched and multi adapters can also be used.

Power supply required is single phase only

(all power cables will be provided).

Electrical specifications

Laboratory Power Supply

Voltage range: 110V/220V: 50/60Hz

Operating Current: 10A/20A

Output Current: 60V/20A

Function Generator

Voltage: 115/230 V: 50/60Hz

Bandwidth: 20MHz

Oscilloscope

Voltage Range: 100-240/100-120V

50/60/400Hz

Power: 30W Max

Magnetherm

Voltage: 115/230 V: 50/60Hz

Power: 5.4W

DC Input: 32V

Mechanical specifications

Laboratory Power Supply

Dimensions: 30 x 24 x 12 cm

Weight: 4.25Kg

Function Generator

Dimensions: 26 x 24 x 9 cm

Weight: 2.8Kg

Oscilloscope

Dimensions: 35 x 15 x 10 cm

Weight: 3Kg

Magnetherm

Dimensions: 32 x 27 x 16 cm

Weight: 8.5Kg

Environmental and safety specifications

Temperature ranges:

Normal operation: 5-40 °C

At maximum power: 5-30°C

Storage: -20 – 70°C

Humidity: 20-80%

Environmental and safety

EMC 2004/108/EC according

UNE-EN 61326-1:2006 Class A

Low Voltage Directive (LVD)

2006/95/EC according to UNE-EN-61010-1

System requirements

Electrical supply: connect all modules following Instruction manual.

Coil Cooling via Laboratory Tap water supply: Typical flow: 320mL/min.

Two flexible tubes of 6mm internal diameter to connect to push fit connectors .

Optional Recirculating chiller: Cooling power 2000w min. Typical flow: 5L/min

Typical input pressure: 530 mbar.

Standard accessories

Two push fit connectors for the cooling system

Temperature measuring system: Thermocouple 'T' Type /USB Data logger

Temperature measuring

High resolution fiber optic signal conditioner & fiber optic temperature probes (2m) sensor with protected tip.

Measuring range: -10°C to 150°C Precision: ±0.2 °C

Compatible accessories

NAN201010 Drug release option for in vitro tests (optional real time detection)

NAN201007 Live Cell option -temperature and CO2 control

NAN202400 Infrared thermal image option

NAN201008 In Vitro Water Jacket Option

NAN202064 High Field Strength Option

Custom options available on request

Standard Frequencies & Flux Density

Frequency	Bmin [G]	Bmax [G]
110	1	250
168	1	170
176	1	230
262	1	230
335	1	170
474	1	110
523	1	200
633	1	90
739	1	160
987	1	120

*Frequencies and intensities on available devices may differ. Frequencies are nominal and may change according to manufacturers specification. Field strength is provided in peak Gauss value.