



The magneTherm comes with Capacitors and Coils to offer 10 Standard Frequencies. Resonance tuning is manual. Standard USB temperature data logger (Optical sensor & probes can be used, single or dual) enabling recording of data onto a desktop or laptop computer.

**Product Code: NAN201003**

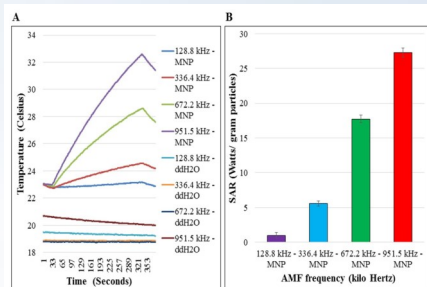
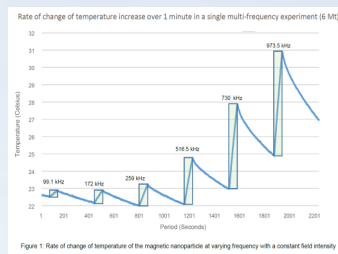
10 Standard Frequencies from 50kHz to 1000kHz

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

Various Temperature monitoring options including Fibre Optic, Infra Red and thermocouple.

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 CO<sub>2</sub> & Temperature Control
- Large Format Coil and Water Jackets Options
- Drug Release/Delivery Option
- High Field Strength Option up to 50mT

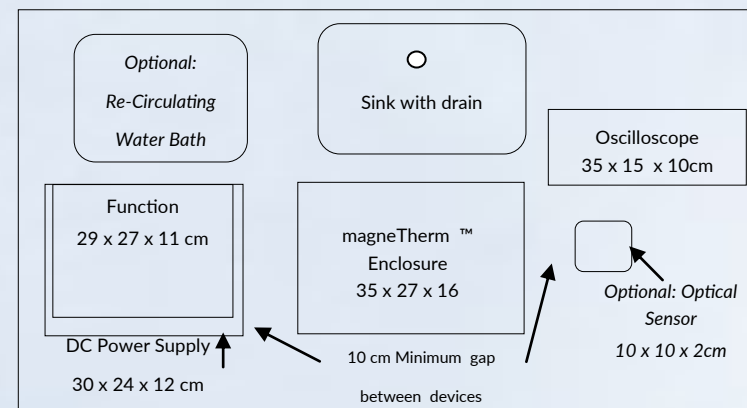
System Specification:

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



Power Requirements

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

Preferably 4 individually switched power sockets, non-switched can also be used as can multi adapters.

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: 32V/20A

#### Function Generator

Voltage: 115/230 V: 50/60Hz  
Power: 17W 21VA

### Mechanical specifications

#### Laboratory Power Supply

Dimensions: 30 x 24 x 12 cm  
Weight: 13.5Kg

#### Function Generator

Dimensions: 29 x 27 x 11 cm  
Weight: 3.1Kg

### 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.

#### 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

#### Oscilloscope

Dimensions: 35 x 15 x 10 cm  
Weight: 3Kg

#### Magnetherm

Dimensions: 32 x 27 x 16 cm  
Weight: 8.5Kg

### Standard accessories

Two push fit connectors for the cooling system  
Temperature measuring system: Thermocouple 'T' Type /USB Data logger

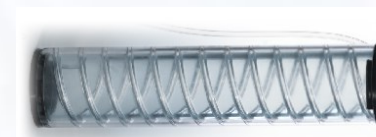
### Optional Temperature measuring

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  
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.