



The latest addition to the magneTherm family of products. **Fully automated and integrated system** with **complete software control** of all parameters – field strength, frequency, pulse width, thermal sensing, graphing, data collection and calculation. **No need to change coils or capacitors**, simply connect the AMF Power Module to the Coil Module you require and you're ready to go

**Product Code: NAN201000**

10 Standard Frequencies from 40kHz to 700kHz

Field Strength up to 50mT (500 Gauss/40 kA/m)

Integrated closed loop temperature control

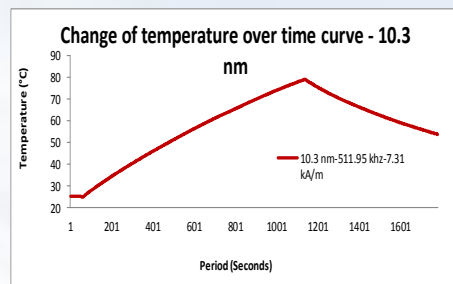
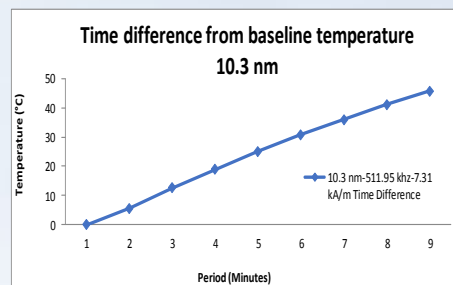
Full software control of all parameters

Real time calculation of field strength

Pulse frequency modulation

Frequency / Power variation in real time

Excellent thermal insulation



Accessories for additional applications compatible with this system:

- *In Vivo Water Jacket Option*
- *Cell Exposure Module with CO<sub>2</sub> & Temperature Control*
- *Large Format Coil Modules and Water Jackets*
- *Drug Release/Delivery Option*

Desktop computer supplied with magneTherm Digital

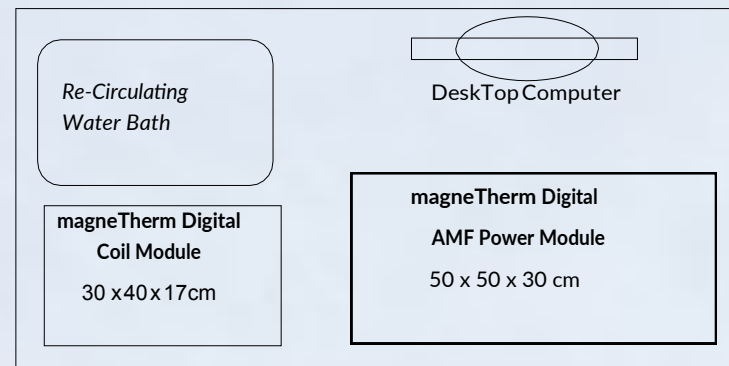
System Specification:

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 – minimum 3, DVD-ROM drive



Power Requirements

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

Preferably 3 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

#### Operating connection 1:

Voltage range: 0-240 V DC

Maximum power: 3500 W

Maximum current: 15A

#### Operating connection 2:

Voltage: 110 - 240V, 50 - 60 Hz

Maximum power: 1200 W

Maximum current: 5 A

### Mechanical specifications

Dimensions: 800 mm x 900 mm x 470 mm

Weight: 30 kg

### 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-61010-1:2011

### System requirements

Electrical supply: connect the Power module and coil module connecting cable before starting

Liquid heating/refrigeration system

Minimum cooling power: 2000 W

Typical flow: 5 l/min

Typical input pressure: 530 mbar

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

### Standard accessories

Two push fit connectors for the cooling system

Temperature measuring system: Dual channel high resolution fiber optic signal conditioner (integrated)

2 fiber optic temperature probes (2m) sensor with protected tip

### Technical specifications (fibre optic):

Measuring range: -10°C to 150°C

Precision: ±0.2 °C

Probe-holder sample set:

Temperature sensor x 2

Sample holder x2

### 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

Custom options available on request

### Field distribution on the sample volume

Volume configuration	Axial field attenuation	Minimum radial field attenuation	Maximum radial field attenuation
H = 50mm	<10%	<8%	<15%

### Calorimetric Coil Module

f [kHz]	Bmin [G]	Bmax [G]
110	1	500
168	1	500
176	1	500
262	1	300
335	1	300
523	1	300
633	1	200
650	1	200
700	1	200

\*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. For peak to peak value x 2.

