



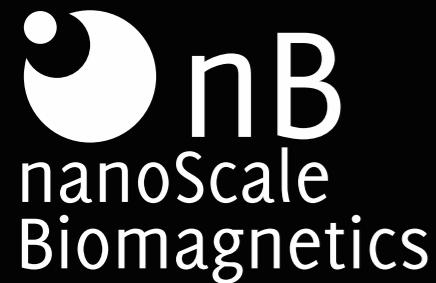
nB's D5 Series is the result of a decade of perfecting the concept and the technology behind our instruments for Magnetic nanoHeating.

The D5 Series is built with the same ergonomics, precision and reliability that made the DM100 the top-shelf magnetic heating products for years, but with improved control technology, unlimited number of frequency modes, more power, flexibility and expandability.

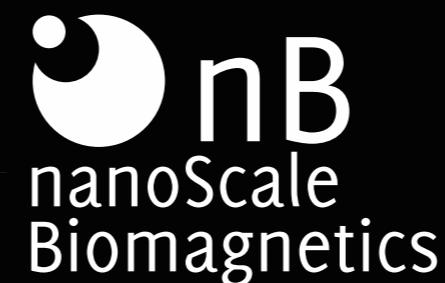
And yes. More affordable.



# Magnetic Hyperthermia in your research lab Today



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# Drivers

The D5 Series is formed by Drivers, Coils and accessories. The driver is the main device, onto which coils and accessories are plugged. The Driver is controlled by Maniac, nB's proprietary software, running on any external computer with USB connection.

**All Drivers can drive all coils and all accessories.** And all drivers can be set for virtually **any frequency**. There is no limit to the number of frequencies you can configure in your system because all D5 Drivers are capable of **self-calibrating once an external plug-in capacitor and/or a coil are installed**.

All drivers can be equipped with 1, 2 or 4 integrated fiber optic temperature probes. There are 5 drivers divided in 2 groups: The **F** Drivers and the **G** Drivers.

**The G drivers** are the most complete instruments of the series. They can automatically handle **15 frequency modes for each coil** (\*). This is achieved by the automatic reconfiguration of the internal capacitor bank, just like in DM100 applicators, but with several improvements.

You can also install an additional plug-in capacitor and get no less than **16 new frequency modes** (\*). That's for each one additional capacitor. And you can get as many of them as you want.

The **F** drivers can automatically handle **only one frequency modes for each CoilSet**. The working frequency is fixed by the coilset and the fixed internal capacitor.

You can tune the **F** systems to virtually any other frequency too, just by installing a plug-in capacitor in the front panel connector. Therefore, in the F models, the frequency exchange procedure is carried out by the user, although the calibration and the rest of the operation remains automatic and software-controlled. A cost-effective solution that does not compromise any quality feature.

(\*) Lower frequency modes are usually close to each other in frequency, so a set of 15 or 16 frequency modes in the practice can be considered to provide approx 10 well-distributed frequency modes. Please, see Coilset catalog for more details.

**All the applications. All the frequencies  
All in one instrument**



Driver	Power	# of frequency modes per coil (*)	# of additional frequency modes per additional plugin capacitor (*)
<b>F1</b>	640W	1	1
<b>F2</b>	1500W	1	1
<b>F3</b>	3000W	1	1
<b>G2</b>	1500W	15	16
<b>G3</b>	3000W	15	16

## CAL 1

Designed for calorimetry experiments in colloids. (SAR measurement) in 2ml vials. Provides 5% homogeneity and thermal insulation. Sealed glass dewar flask. No vacuum pump required.



## CAL 2

Just like CAL1, but with an open dewar flask with vacuum connection for turbomolecular or rotary vacuum pump. Achieves excellent insulation for calorimetry experiments.



## PC 70/PC 90

Flat CoilSets designed for experiments on petri dishes and other planar samples. Huge 70mm/90mm diameter. Designed to work with CAT accessory.



PC<sup>90</sup> with CAT and Infrared window

## S(n)

Classic solenoidal coils with different diameters and heights. Provide an inexpensive solution to unusual setups. Up to 150mm diameter enables experiments with rabbits. Small diameter CoilSet (18mm) enables above 1 KGauss/0.1T/80KAm AMF.



## H

Semi open coil array with integrated thermalized animal bed for in vivo experiments with mice. Enables partial observation window for video and thermal imaging.



## Double H

Open coil array with integrated thermalized animal bed for in vivo experiments with mice and rats on axial and perpendicular placement. Enables full body observation window for mice and partial body observation for rats.



# Accessories

## Thermal Image System for D5 and DM100 systems

### IR1

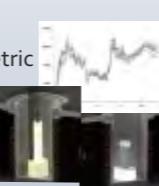
Allows you to make real time surface thermal images and movies. Full integration with MANIAC enables advanced analysis functions and IR data-controlled experiments



## Drug release monitor for D5 and DM100 Series

### DRM

Real time spectrophotometric sensing of released drug for experiments based on magnetically triggered drug release.



## Controlled Atmosphere and Temperature cell culture holder

### CAT

Enables atmosphere and temperature control in cell culture experiments on PC<sup>70</sup> and PC<sup>90</sup> CoilSets for petri dishes up to 70mm



## Real time AMF application on inverted microscope

### μHeat

Real time AMF application accessory for inverted microscope. Enables time lapse movies during precise MHT experiments on a thermally controlled sample holder.



## Circulating water bath for thermalisation.

### Warmer

Water heater and circulator for thermalisation of CAT accessory, animal beds and for general purposes. Works with MANIAC and as a standalone device.



Maniac is now available for Windows OS. Connected to any D5 Driver, Maniac provides:

- Fully automatic test execution
- Complex experiment sequencing
- Integration and automation of accessories
- Quick calculations and data processing
- Data import/export

