

DRUSCH

NMR Gaussmeter

portable and 19" rack type

- 0.02 - 9.00 Tesla
- auto signal search
- interface to pc
- data storage and processing



Based on the principle of nuclear magnetic resonance the DRUSCH NMR-Gaussmeter measures magnetic fields of sufficient homogeneity from 0.02 to 9.00 Tesla with an absolute accuracy better than 0.5 microTesla.

The measurement will be done automatic whereat fast scan tracking accelerates and eases the signal detection. It is also possible to make the measurement manual.

Via the interfaces RS 232 or IEEE 488 functions like signal detection can be driven through a computer. In addition it is possible to connect the gaussmeter to an oscilloscope for visualizing the signal.

By the keyboard up to 10,000 measured values can be processed with respect to storage, average, and deviation.

DRUSCH offers the nmr gaussmeter in two versions: As 19" rack or portable type. The rack version can be connected to a multiplexer, whereby it is possible to switch between several probes and control the probe selection through the gaussmeter.

Measuring Modes

automatic

- fast scan tracking the whole probe range

manual

- in certain cases, where the magnetic field lacks uniformity, field search can also be done manual
fast scan tracking the whole probe range

Interfaces

- BNC - signal and trigger port towards an oscilloscope
- DB 25 - connection towards multiplexer (rack only)
- Lemo - single connection towards preamplifier/probe
- RS 232 - digital interface towards computer
- IEEE 488 - digital interface towards computer

Via the digital interfaces following functions can be driven through a computer:

- internal clock
- measuring mode
- NMR signal
- NMR frequency
- probe type
- signal locking status

Specifications

Measuring range	0.02 to 9.00 T
Absolute accuracy	better +/- 0.5 μ T
Relative accuracy	better +/- 0.1 μ T
Internal counter stability	< 0.5 ppm bet. 15°C to 30°C +/- 1ppm over 0°C to 70° < 1 ppm / 1st year < +/- 0.5 ppm /next years
Automatic tracking	100% of the probes range
Tracking velocity	0.01 T/sec.
Max. time for registration	4 to 16 sec., dep. on probe
Reading rate	2 / sec.
Reading	8 digits LED
Resolution	0.1 μ T
Environment temperature	0°C to 40°C
Storage temperature	-20°C to +70°C (incl. probe)
Max. magnetic field of environment	0.2 T
Mains voltage	40 VA - 110-120V / 220-240 V - 50/60 Hz
Dimensions (w-h-d)	portable: 343 - 2U - 370 mm rack: 19" - 2U - 352 mm
Weight	6.5 kg

Scope of Supply

- gaussmeter (portable RS 232, portable IEEE 488, rack RS 232 or rack RS 232 + IEEE 488)
- preamplifier
- cable (standard: 5 m)
- probe (one, standard housing)

Add. Equipment

- additional probes (from 0.02 to 9.00 T)
- multiplexer (for rack version)
- transportation box (for portable version)

Contact

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