

NMR20 GAUSSMETER

High Precision NMR Gaussmeter

Used for MRI Calibration, HALL sensors calibration, Magnetic Field Monitoring or Regulation.

DESCRIPTION

The NMR20 Gaussmeter measures magnetic fields using the principle of nuclear magnetic resonance (NMR). This is the most precise technology for measuring an absolute magnetic field value.

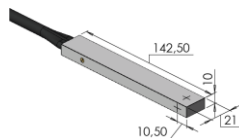
Features

Size	19" 2U P350
Range	14mT - 13 T
Resolution	0,01 μ T (0,1 mG)
Absolute Precision	<+/-0.5 μ T
Relative Accuracy	<+/-0.1 μ T
Internal clock stability	+/-1ppm (0°C-70°C)
1st year Stability	<1 ppm
After 1 year	<+/-0,2 ppm / year
Rate	2 Hz
Required homogeneity	<2000 ppm/cm (1Tesla)
NMR Signal tracking Time	< 1 s (with HALL)
Channels	Up to 256
Interfaces	RS232, USB, Ethernet
Maximum distance	300 meters

STANDARD PROBES

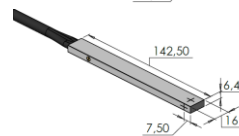
• Model A

Very low field
 Available from 14mT to 200mT
 Size: 21 x 10 x 142 mm
 HALL Sensor



• Model B

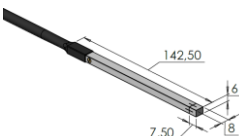
Small thickness (6mm)
 Available from 40mT to 13T
 Size: 16 x 6,4 x 142 mm
 HALL Sensor



SPECIAL PROBES / MINIATURE

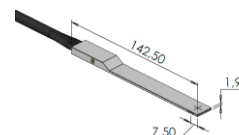
• Model C

Small thickness (6mm) and small larger (8mm)
 Available from 40mT to 3T
 Size: 8 x 6,4 x 142 mm
 No HALL Sensor

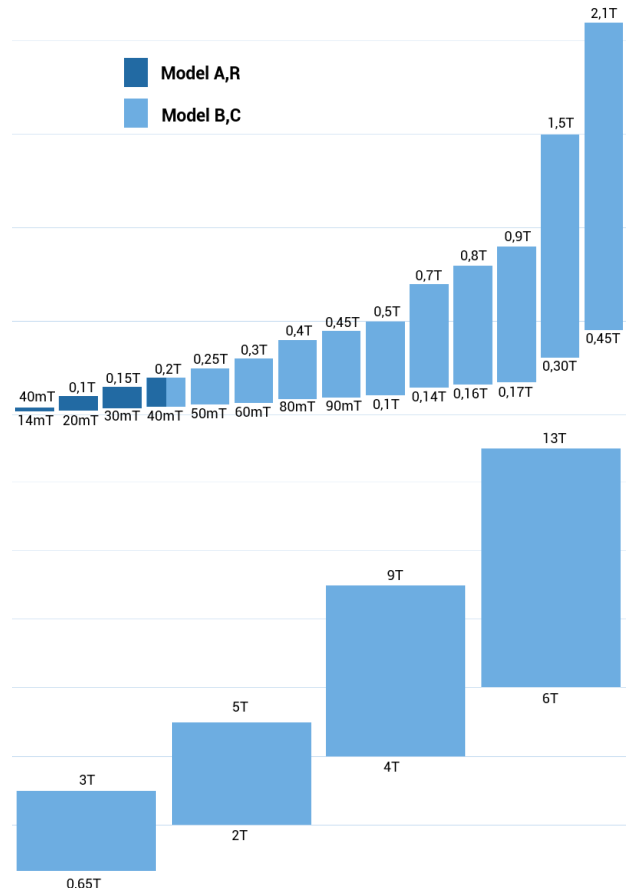


• Model T

Very Small Thickness (2mm)
 Size: 16 x 2 x 142 mm
 HALL Sensor



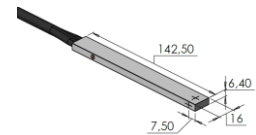
STANDARD PROBE RANGES



SPECIAL PROBES / DOUBLE PROBE

• Model D

Double probes in one case
 Available from 100mT to 3T
 Size: 16x 6,4 x 142mm
 HALL Sensor



SPECIAL PROBES / FOR SPECIFIC ENVIRONMENT

• Model R

The sample is deprotected from any electronic at 11cm even Varicaps (CAYLAR exclusivity), Used for high radiation.
 Size A : 20x10 x 252mm
 Size B : 16x6,4 x 252mm
 Size C : 8x6 x 252mm
 No HALL Sensor, Model R available in version D (Double).

• Model R+

The sample is deprotected from the electronic at 40cm even Varicaps (CAYLAR exclusivity), Used for very high radiation.
 Available up to 0.5T. Size A from 14mT, Size B&C from 40mT
 Size A: 16x6,4 x 25mm (Sample) / 16x6,4 x 142 mm (Elec.)
 Size B: 21x10 x 15mm (Sample) / 16x6,4 x 142 mm (Elec.)
 Size C: 21x10 x 15mm (Sample) / 8x6x 142 mm (Elec.)
 No HALL Sensor



The NMR20 Gaussmeter is the successor of the famous NMR 2 Gaussmeter (DRUSCH NMR Teslameter). Technology approved since the 1970s.

CAYLAR offers a magnetic field measurement by Nuclear Magnetic Resonance (NMR) which allows an absolute measurement of the magnetic field, with a resolution of 0.1 mG (0.01 μ T) without temperature influence.

The low-field NMR probes associated with the NMR20 Gaussmeter have the particularity of having a large measurement range with a dynamic range greater than 5 and of measuring low fields from 140 G (14 mT) up to 13T.

- 0.5 μ T Absolut accuracy
- Large Dynamic range (x5)
- High tolerance to field gradients <2000 ppm/cm at 1 Tesla
- Low Field measurement <14mT
- Small probes: from <2mm thickness
- Measurement display on the front of the instrument
- High radiation environment
- Possibility to customize probes range and shape
- Analogic output for Power Supply regulation available
- 5 years warranty