

The new NMR25-4 teslameter redefines compact NMR magnetic field measurement technology. Fully integrated in a **1U rack format**, this all-in-one instrument combines the gaussmeter, four probes multiplexer, and preamplification stage into a single unit. Designed for maximum simplicity, it can operate with a single Ethernet PoE or USB-C cable offering an ultra-compact and easy-to-integrate solution for high-precision measurements.

### Ultra-High Resolution and Ultra-Low Noise Performance

5 nT Reading resolution with < 0.5  $\mu$ T absolute accuracy  
Noise down to 0.1  $\mu$ Tpp

### Ultra Compact Format & Small Probe Size

1U format, 210 x 135 x 44 mm (L x W x H), < 1 Kg weight  
Two units fit within a single 19-inch rack width  
Extremely compact standard probes: 6 x 16 x 142 mm

### Smart and Flexible Connectivity

2 USB-C ports for serial-over-USB operation  
RS232 /485 through 9 pts Sub-D connector (up to 921 600 bauds)  
RJ45 Ethernet connector with power over ethernet (PoE / PoE+)

### Low Power Equipment

Power consumption < 5 Watts (5V - 1A max)  
Flexible power input options via Ethernet (PoE), SUB-D, or USB-C connectors, with optional wide-range 5 to 24 V power input  
Can be powered from a smartphone charger, PC USB port, or external power bank

### High tolerance to field gradients

Tolerates field gradients > 2 mT/cm at 1 T (2000 ppm/cm)

### High-Speed Reading and Low Search Time

Fast 100 Hz measurement rate with adjustable moving average from 1 to 250 measurements  
Finds and locks onto the signal in less than one second

### Wide Measurement Range

16 mT to 13 T, with high dynamic range probe of 5:1 typical  
90 mT to 2.2 T or 140 mT to 3 T covered using 2 probes  
16 mT to 2.2T covered using 3 probes

### Reliability & Service Continuity

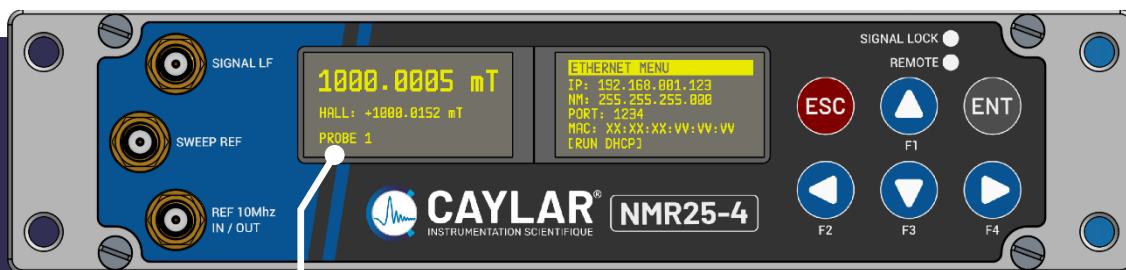
5-year warranty & long-term support availability  
40+ years of Drusch service expertise

### Suitable for High-Radiation Environments

No active components inside the probe  
Proven performance under extreme radiation for over 20 years

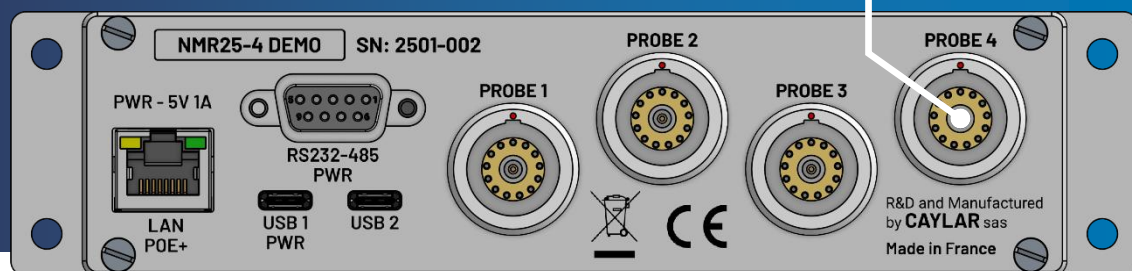
### Custom Probe Solutions

Ultra-Thin Probe Design (< 2 mm), UHV compatible probes  
Custom geometry and range



**Front-panel control** via the integrated keypad and display enables standalone operation without external control connections.

**Supports up to 4 probes**, with an internal multiplexer. Optional parallel multi-channel readout.



## NMR25 TESLAMETER

High Precision NMR Teslameter

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

### DESCRIPTION

The NMR25 Teslameter measures magnetic fields using the principle of nuclear magnetic resonance (NMR). This is the most precise technology for measuring an absolute magnetic field value.

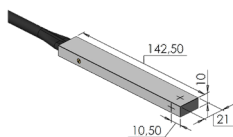
#### Features

Size	Half 19" 1U P210
Range	14mT - 13 T
Noise	0.1 $\mu$ T pp
Absolute Precision	< 0.5 $\mu$ T
Internal clock stability	$\pm$ 1 ppm (0°C-70°C)
1st year Stability	<1 ppm
After 1 year	< $\pm$ 0,2 ppm / year
Required homogeneity	<2000 ppm/cm (1Tesla)
NMR Signal tracking Time	< 1 s
Channels	4 channels
Interfaces	RS232/485,USB-C,Ethernet
10Mhz Clock reference	External in & Internal out
Power	5W through PoE / USB / RS232

### STANDARD PROBES

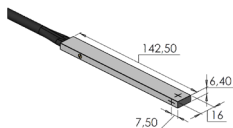
#### Model A

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



#### Model B

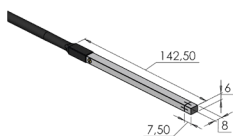
Small thickness (6mm)  
 Available from 40mT to 13T  
 Size: 16 x 6,4 x 142 mm  
 HALL Sensor



### SPECIAL PROBES / MINIATURE

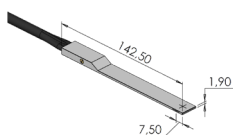
#### Model C

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

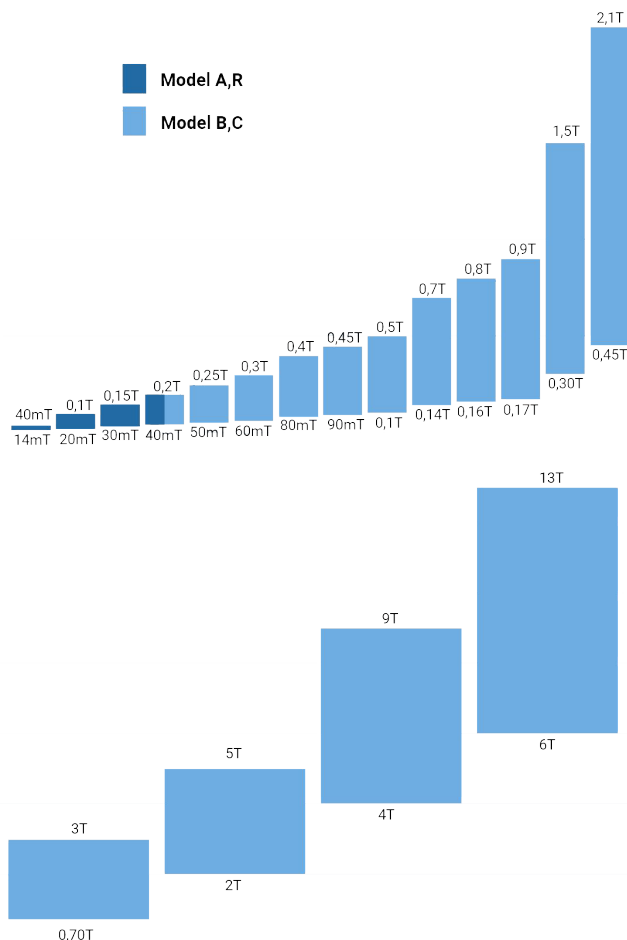


#### Model T

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



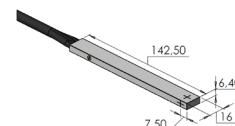
### STANDART PROBE RANGES



### 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 deported at 11cm from **passive** components. 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 deported at 40cm from **passive** components. 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