

## Modern, Hall-effect teslameter type RX – 21b

The RX-21b is an efficient, smart, Hall-effect teslameter for measurement of induction of magnetic field. The instrument measures both AC and DC parts of magnetic field and has serial port output for data acquisition.

In order to increase precision and stability of the instrument, the design utilizes advanced digital signal processing, digital filtering as well as temperature measurement with temperature correction and dynamic correction of measured results. Nuclear Magnetic Resonance (NMR) is used for accurate instrument calibration.

### Technical data

• Modes of measurement	<b>DC, AC</b> (20 Hz - 25 kHz, true RMS), <b>temperature*</b>
• Ranges	<b>DC:</b> $\pm 300.00$ mT; $\pm 3000.0$ mT and auto, <b>AC:</b> $\pm 300.00$ mT
• Resolution	0.01 mT and 0.1 mT, $\pm 0.1$ °C *
• Accuracy **	<b>DC</b> - $\pm(0.4\% + 2 \text{ digits})^{**}$ , <b>AC</b> - $\pm(1.2\% + 3 \text{ digits})^{**}$
• Units	Gs, mT, A/m, °C
• Ranging	manual or automatic
• Probes	transverse (thickness - 2,2 mm); axial (thickness - 2,6 mm); length - 450 mm, flexible
• Display	LCD, 8 characters x 2 lines
• Display capacity	30 000 units
• Digital interface	two-way RS 232
• Additional modes	<b>relative</b> and <b>peak hold</b>
• Sampling rate	5 /sec
• Temperature range *	-10 °C to +60 °C; $\pm 0.1$ °C
• Temperature correction of results of measured magnetic field *	
• Dynamic probe corrections	
• Audible signal of pushbutton action	
• Automatic latching of last used functions after turn off	
• Auto zeroing after turn on	
• Auto shut-down after 10 minutes of non -active pushbuttons	
• Analog output (AC mode only) for signal shape viewing	
• Battery status indicator	
• Nonvolatile memory (last 512 results)	
• Power supply	9 V/12 mA
• Total weight	approx. 180 g

\* - option

\*\* - with temperature probe correction only

## Standard equipment

- standard probe axial or transverse
- soft case
- alkaline battery 9V, 6F22
- manual
- MagPro 3.1 PC software for data acquisition and processing

## Optional accessories

- additional probe axial or transverse
- zero field chamber 40dB attenuation at 30 mT
- probe with temperature measurement and temperature correction of magnetic field results
- PC - teslameter cable for two-way data transfer
- extension of probe connection cable (up to 3 m)
- AC adapter
- specialized probe (possibility of magnetic field measurement at whole range of 0 - 5 T by means of two arbitrarily selected ranges) axial or transverse.

