





# A COMPLETE LINE OF NMR PROBES



## AMPLIFIER INTEGRATED

Compact and easy-to-handle solutions for general-purpose use.

The general-purpose 1062 miniature probes are totally enclosed in a robust, standardized BeCu housing with a tough cable strain-relief, and include an integrated amplifier.

## EXTERNAL AMPLIFIER REQUIRED

Placing most of the active electronics in a separate box.

The 1060 and 1080 probes are designed for use with an external amplifier, for example for high-radiation environments.

## THE ULTIMATE IN PRECISION

Resolution of under 1 Hz, relative precision of under 0.1 ppm, absolute accuracy of 5 ppm, independent of temperature.

## FLEXIBILITY AND EASE OF USE

Search and lock in on NMR resonant frequency manually, semi- or fully automatically, with the ability to monitor the raw NMR signal. Track fields changing at up to 1%/sec. Display measurements in T or MHz.

## STANDARD COMPUTER INTERFACES

RS232 or IEEE488 (optional).

## WIDE MEASUREMENT RANGE

A complete line of NMR probes for fields ranging from 43 mT to 13.7 T. Each probe covers a range of approximately 300%, for example from 0.35 to 1.05 T. The PT2025 automatically recognizes the range of the probe when it is plugged in.

## PROBE SPECIFICATIONS

Probes for up to 2.1 T use a robust solid sample; for higher fields, an ampule of deuterium (heavy water) is used.

PROBE RANGES	FIELD STRENGTH [T]	SAMPLE SIZE [mm, DxL]	REQUIRED FIELD HOMOGENEITY [ppm/cm]
R = 1	0.043 - 0.13 *	7 x 4.5	600 - 900
R = 2	0.09 - 0.26 *	5 x 4.5	1,200 - 1,600
R = 3	0.17 - 0.52	4 x 4.5	1,200 - 1,400
R = 4	0.35 - 1.05	4 x 4.5	800 - 1,500
R = 5	0.7 - 2.1	4 x 4.5	250 - 600
R = 6	1.5 - 3.4	4 x 4.5	240 - 280
R = 7	3.0 - 6.8	4 x 4.5	160 - 300
R = 8	6.0 - 13.7	4 x 4.5	50 - 120

\* The lower range limit of the subminiature probes lies slightly higher than those of the miniature probes

Temperature range	+5 °C to +40 °C
Storage temperature	-20 to 80 °C (proton probes) +5 to 70 °C (deuterium probes)



### MINIATURE

Axial & transverse magnetic fields

16.5 x 12.5 x 230 mm, fits in 19 mm diameter.

1062

1060

### SUBMINIATURE

Transverse magnetic fields

Designed for applications that require a more compact probe.  
16.5 x 12.5 x 115 mm + 9 x 6 x 155 mm, fits in 10 mm diameter.

1082

1080

Amplifier	Built in	Model 1030 required
Cable length	10 meters, special lengths available, up to 100 m	7 meters, special lengths available, up to 100 m
Connectors	one 8-pin LEMO and one BNC	one 5-pin LEMO and one BNC