

## MINIATURE HIGH SENSITIVITY HALL PROBE

- Very small sensitive area, small physical size.
- Ten times the sensitivity of MPT-132.
- High accuracy:  $\pm 0.03\%$  max. error at 25°C\*.
- Low thermal drift: -800ppm/°C max\*.
- Low zero drift:  $\pm 0.12$  gauss/°C max\*.
- Calibration tables at 0, 25 and 50°C supplied with each probe.

\*contribution of probe only.

### Specifications of system – MPT-230 with DTM-133 and DTM-150 teslameters:

Orientation	Transverse, reads positive when field vector enters top epoxy surface																														
Field ranges	0.03 0.06 0.12 0.3 tesla full-scale 0.3 0.6 1.2 3.0 kilogauss full scale with polarity indication																														
Accuracy at 25°C	$\pm(0.03\%$ of reading $+0.03\%$ of full scale) max. with DTM-133 $\pm(0.03\%$ of reading $+0.006\%$ of full scale) max. with DTM-150																														
Resolution	<table border="1"> <thead> <tr> <th>range</th> <th colspan="2">DTM-133 resolution</th> <th colspan="2">DTM-150 resolution</th> </tr> <tr> <td></td> <th>gauss</th> <th>tesla</th> <th>gauss</th> <th>tesla</th> </tr> </thead> <tbody> <tr> <td>0.03 tesla</td> <td>0.05</td> <td>0.000005</td> <td>0.001</td> <td>0.0000001</td> </tr> <tr> <td>0.06 tesla</td> <td>0.1</td> <td>0.00001</td> <td>0.002</td> <td>0.0000002</td> </tr> <tr> <td>0.12 tesla</td> <td>0.2</td> <td>0.00002</td> <td>0.004</td> <td>0.0000004</td> </tr> <tr> <td>0.3 tesla</td> <td>0.5</td> <td>0.00005</td> <td>0.01</td> <td>0.000001</td> </tr> </tbody> </table>	range	DTM-133 resolution		DTM-150 resolution			gauss	tesla	gauss	tesla	0.03 tesla	0.05	0.000005	0.001	0.0000001	0.06 tesla	0.1	0.00001	0.002	0.0000002	0.12 tesla	0.2	0.00002	0.004	0.0000004	0.3 tesla	0.5	0.00005	0.01	0.000001
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Temperature range	0 to 50°C operating to spec, -20 to +60°C max.																														
Temperature stability	calibration: -820ppm of reading/°C max. -3ppm/°C of reading per meter of probe cable zero drift: $\pm(12\mu\text{T} + 0.0015\%$ of full-scale)/°C max. with DTM-133 $\pm(12\mu\text{T} + 0.0003\%$ of full-scale)/°C max. with DTM-150																														
Probe dimensions	overall size: 14 x 5 x 2 mm sensitive area: 1 x 0.5mm unshielded part of cable at probe head: 4.5mm diam. 300mm nom. length shielded cable: 6.5mm diam.																														
Order code	MPT-230-2s for probe with basic 2 meter shielded cable length. Special probe cable lengths may be ordered up to 30 meters max. Single-range probes: add range suffix -03 -06 -12 -30, e.g. MPT-230-03-2s.																														

