

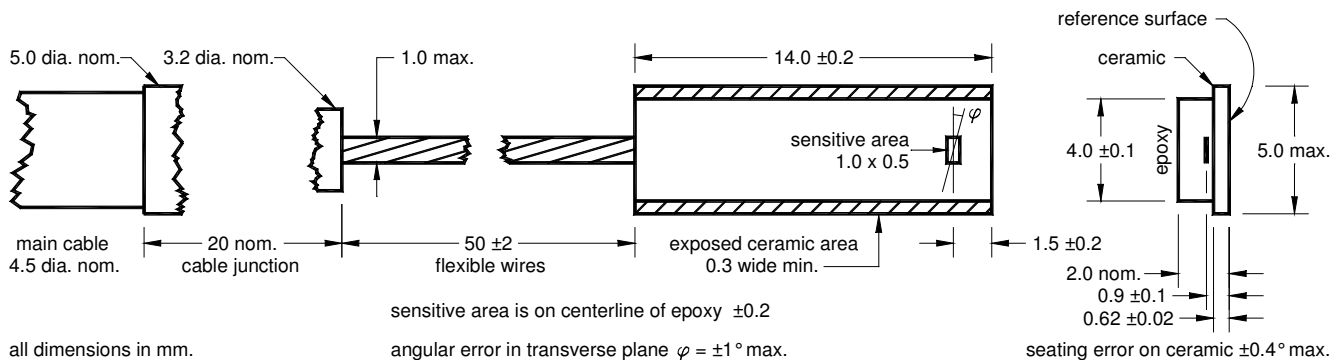
## MINIATURE HIGH SENSITIVITY HALL PROBE

- 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<br>$\pm(0.03\%$ 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 |
| 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  |                    |  |  |       |       |       |       |            |      |          |       |           |            |     |         |       |           |            |     |         |       |           |           |     |         |      |          |
| Temperature range     | 0 to 50°C operating to spec, -20 to +60°C max.  |          |                    |           |                    |  |  |       |       |       |       |            |      |          |       |           |            |     |         |       |           |            |     |         |       |           |           |     |         |      |          |
| Temperature stability | calibration: -820ppm of reading/°C max.<br>-3ppm/°C of reading per meter of probe cable<br>zero drift: $\pm(12\mu\text{T} + 0.0015\%$ of full-scale)/°C max. with DTM-133<br>$\pm(12\mu\text{T} + 0.0003\%$ of full-scale)/°C max. with DTM-150   |          |                    |           |                    |  |  |       |       |       |       |            |      |          |       |           |            |     |         |       |           |            |     |         |       |           |           |     |         |      |          |
| Probe dimensions      | overall size: 14 x 5 x 2 mm<br>sensitive area: 1 x 0.5mm<br>unshielded part of cable at probe head: 4.5mm diam. 300mm nom. length<br>shielded cable: 6.5mm diam.  |          |                    |           |                    |  |  |       |       |       |       |            |      |          |       |           |            |     |         |       |           |            |     |         |       |           |           |     |         |      |          |
| Order code            | MPT-230-2s for probe with basic 2 meter shielded cable length.<br>Special probe cable lengths may be ordered up to 30 meters max.<br>Single-range probes: add range suffix -03 -06 -12 -30, e.g. MPT-230-03-2s.   |          |                    |           |                    |  |  |       |       |       |       |            |      |          |       |           |            |     |         |       |           |            |     |         |       |           |           |     |         |      |          |



Group3 reserves the right to change the specifications at any time without notice.