

GN 10

Building inclinometer (Tiltmeter)



The GN 10 compact building inclinometer features precise inclinometer sensors with a restricted measuring range of $\pm 10^\circ$ and a resolution of 0.02 mm/m for measured values. It is used to record inclination changes in buildings. Equipped with a sensor for measuring axis x and a temperature sensor, the GN 10/1 tiltmeter records inclinations at right angles to the mounting surface, while the GN 10/2 2-axis sensor measures in both x and y directions.

The inclinometer is also equipped with a controller which calculates a linearized output in third order by the use of the calibration parameters. The measured values are transmitted digitally by means of RS485, protocol GLÖTZL and allows as connection of several tiltmeter in series. A transmission length of up to 1,000 m is possible without an intermediate amplifier. For high-precision measuring results, we recommend the GN 30, which delivers uncompromisingly accurate measuring data.

| Technical data | GN 10/1 | GN 10/2 |
|---------------------------------------|---------------------------------|---------------------------------|
| Dimensions: | 80x80x60 mm* or on requirement | |
| Measuring axes: | 1 | 2 |
| Measuring ranges: | $\pm 10^\circ$ | $\pm 10^\circ$ |
| Measuring resolution: | ± 0.02 mm/m | ± 0.02 mm/m |
| Linearity: | ± 0.2 % f.s. | ± 0.2 % f.s. |
| Temperature coefficient: Zero point: | $< 5 \times 10^{-4}$ °/K | $< 5 \times 10^{-4}$ °/K |
| Temperature coefficient: Sensitivity: | $< 6.5 \times 10^{-3}$ °/K | $< 6.5 \times 10^{-3}$ °/K |
| Operating temperature: | -25 up to +85 °C | -25 up to +85 °C |
| Temperature range: | -40 up to +85 °C | -40 up to +85 °C |
| Cross sensitivity: | $< 0.1^\circ$ at $\pm 20^\circ$ | $< 0.1^\circ$ at $\pm 20^\circ$ |

* In this version, only 1-axis

Recording of measuring data

For recording of measuring data the following instruments are available:

- Automatic recording with data logger MCC which is continuously recording and storing the measuring values in fixed time intervals. It is also possible to transfer the measured values directly online to a computer and to recall them in time intervals. The evaluation is done directly after data transfer by the evaluation program GLA8.

For control of limit values, corresponding alarm threshold values can be set. Furthermore, also an event-controlled data logging is possible.

