

GN 30

Building inclinometer (Tiltmeter)



The GN 30 building inclinometer with wall bracket features a high-precision servo-accelerometer sensors with a measuring range of $\pm 30^\circ$ and a resolution of 0.01 mm/m for measured values. It is used to record the slightest change in a structure's inclination. Equipped with a sensor for measuring axis x and a temperature sensor, the GN 30/1 W tiltmeter records inclinations at right angles to the mounting surface. Also available is the GN 30/2 W as 2-axis sensor for measuring in x and y directions for uncompromisingly accurate measuring data.

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.

Technical data	GN 30/1 W	GN 30/2 W
Dimension (BxHxT):	100x650x95 mm	
Weight:	7 kg	
Measuring axes:	1	2
Measuring range:	$\pm 30^\circ$ (Standard) further upon request	
Resolution:	± 0.015 mm/m (for 30° measuring range)	
Temperature coefficient: Zero point:	< 0.1 mm/m/K	
Temperature coefficient: Sensitivity:	< 0.1 mm/m/K	
Shock load:	100 g	
Operating temperature:	-20 up to $+80^\circ\text{C}$	
Protection class (IP code):	IP 68	

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 a fixed interval. 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 critical values, corresponding alarm threshold can be set. Furthermore, also an event-controlled data logging is possible.



Fig.: Modified building inclinometer for underfloor installation

