

Range $\pm 90^\circ$
High resolution
Good accuracy
Fast response time
Easy to use software

The Dual Axis Inclinometer

is well suited for test and measurement purposes.

A fast response time, good accuracy and high resolution are its key features. It uses a digital signal processing including temperature compensation to optimize performance.

The user configurable filter allows to find a good compromise between response time and a stable output in noisy environments, e.g. if vibrations are an issue.

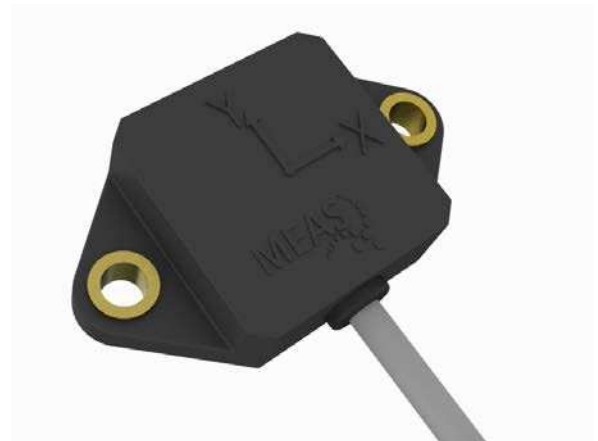
Easy to use software for Microsoft Windows is included. On the other hand, the sensor can be accessed using a virtual COM port for easy integration.

FEATURES

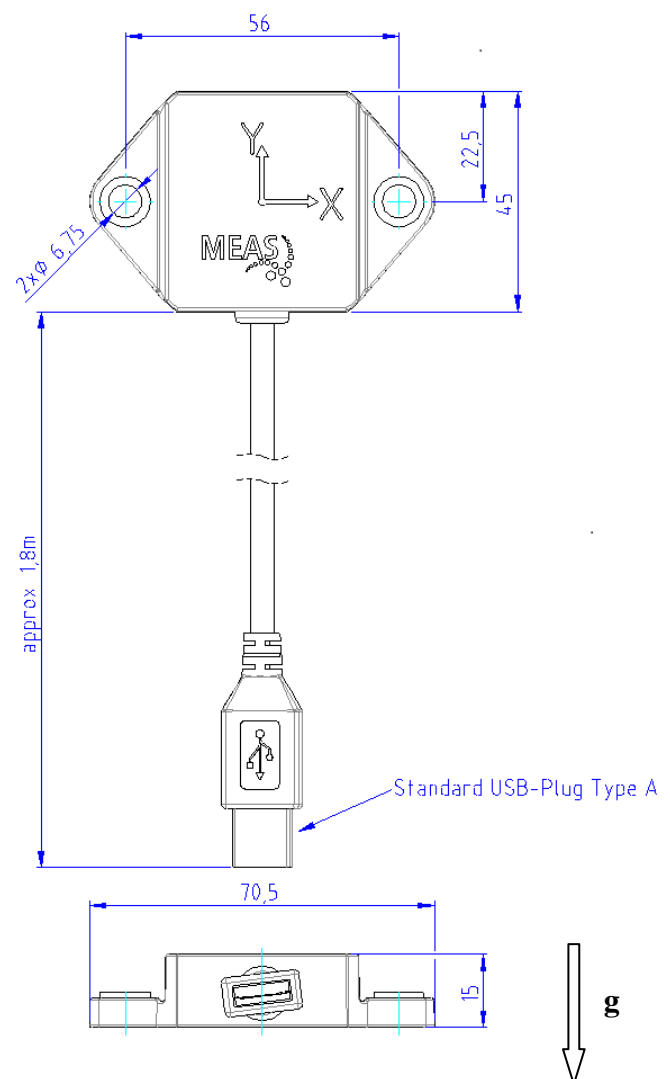
- USB powered
- Digital signal processing includes
 - filter
 - temperature compensation
- 12 bit resolution
- High refresh rate
- -40°C to $+85^\circ\text{C}$ temperature range
- Typical accuracy
 - 0.15° at $+25^\circ\text{C}$
 - 0.5° (-40°C to $+85^\circ\text{C}$)

APPLICATIONS

- Platform leveling
- Tilt alarm
- Tilt monitoring



dimensions



PARAMETERS

Parameter	Value	Comment
Range	+/-90°	pitch & roll
Accuracy, typ.	0.5°	T=-40°C ~ +85°C
Accuracy, typ.	0.15°	T=+25°C
Resolution	12 bit	actually higher resolution due to oversampling
Refresh rate	>50 Hz	Internal, effective output rate limited by communication and PC performance
Startup time	<1s	for valid output angles
Supply/excitation voltage	5V	powered via USB
Output	pitch and roll angle	via USB virtual COM port on host PC
Operation temperature range	-40°C ~ +85°C	
Storage temperature range	-40°C ~ +85°C	
Weight	<50g	
Dimensions	70.5 x 45 x 15 mm	W x D x H

COMMENTS

The DOG2 inclinometer outputs Euler angles, often designated as pitch and roll. These are defined as angle between a sensor axis and the ground plane.

A software for an easy use of the sensor is available and included. It has a setup wizard that helps to make a first configuration quick and simple. Updates can be found on www.meas-spec.com.

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ordering info

PART NUMBERING	UNIT	SHORT DESCRIPTION
G-NSDOG2-021	90 DOG2	Dual axis inclinometer, +/- 90°, USB device incl. Software for MS Windows XP or above