# **DOG2 MEMS-Series USB Inclinometer**



Range ±90°
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**

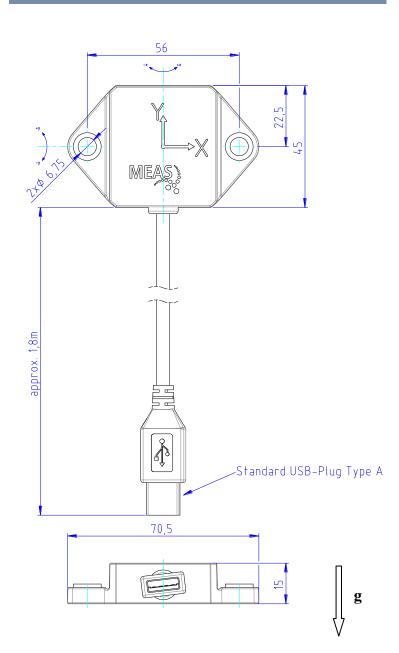
- USB powered
- Digital signal processing includes
  - filter
  - temperature compensation
- 12 bit resolution
- High refresh rate
- -40°C to +85°C temperature range
- Typical accuracy
  - 0.15° at +25°C
  - o 0.5° (-40°C to +85°C)

#### **APPLICATIONS**

- Platform leveling
- Tilt alarm
- Tilt monitoring



### dimensions



DOG2 MEMS-Series USB Rev. 1 www.meas-spec.com 2012-October

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#### **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	WxDxH

#### **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.measspec.com.

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## ordering info

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

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