

# DOG2 MEMS-Series USB Inclinometer

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

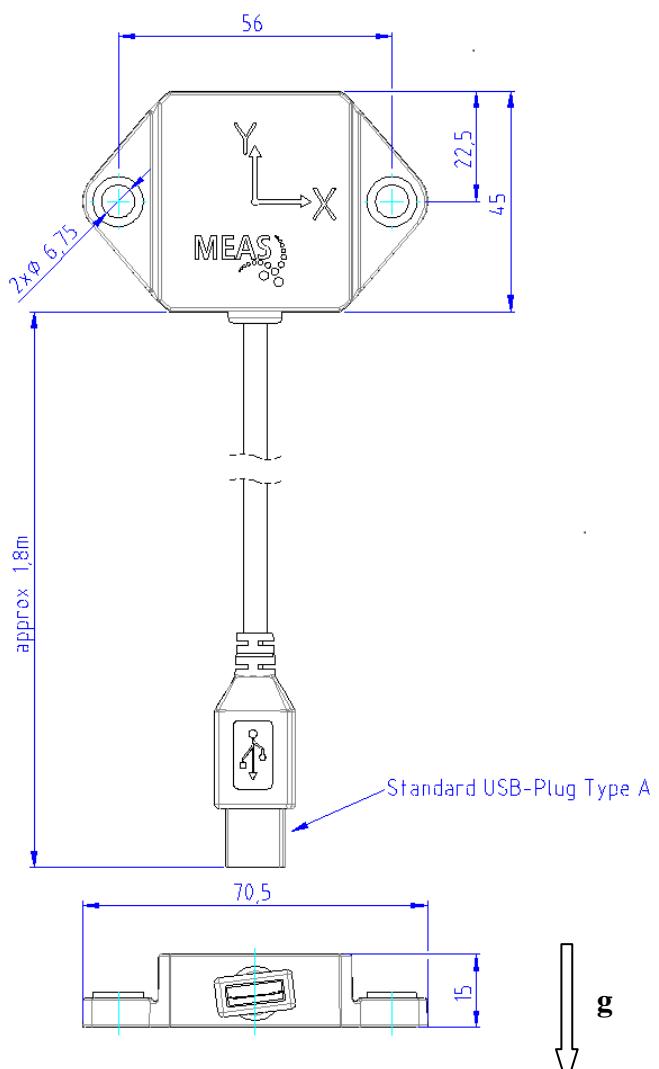
- USB powered
- Digital signal processing includes
  - filter
  - temperature compensation
- 12 bit resolution
- High refresh rate
- -40°C to +85°C temperature range
- Typical accuracy
  - 0.15° at +25°C
  - 0.5° (-40°C to +85°C)

## APPLICATIONS

- Platform leveling
- Tilt alarm
- Tilt monitoring



dimensions



# DOG2 MEMS-Series USB Inclinometer

## 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](http://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 |



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- Подбор аналогов;
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