

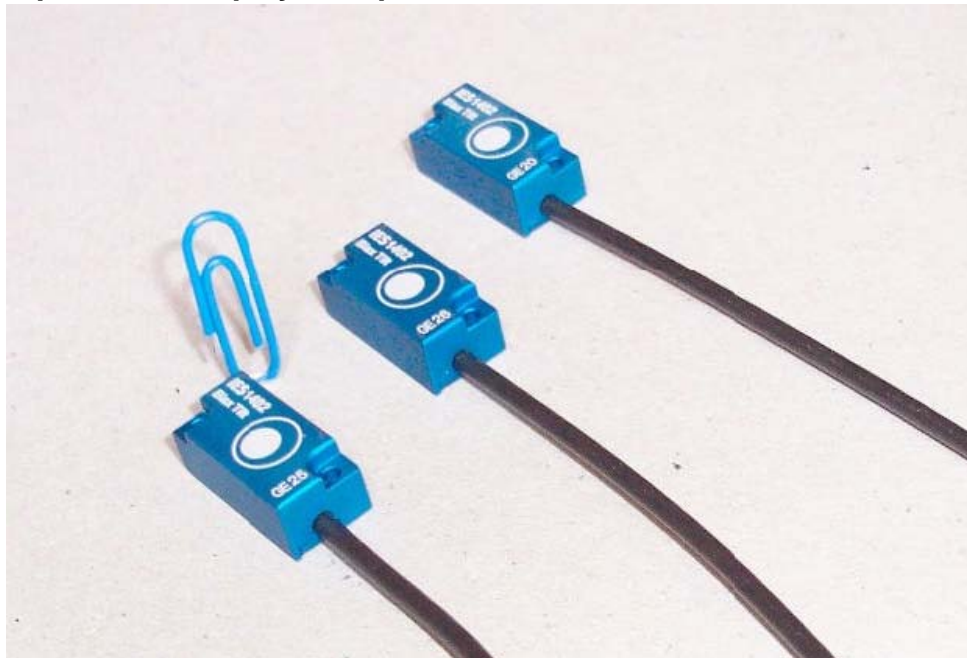
# IES 1402 Dual Axis Tilt Sensor



## PRELIMINARY SHORTFORM DATA

Dual axis very small and light-weight tilt sensor with digital readout intended for integration into crash test dummies or other testing equipment.

- **Dimensions 25 x 12 x 10 mm<sup>3</sup>**
- **Mass only 5 grams**
- **Measuring range +/- 80°**
- **Measuring resolution 0.1°**
- **Built in temperature measurement with 0.1°C resolution**
- **Very little power dissipation**
- **Digital bus interface shared between all members of 1401-Family**
- **Graphical tilt display with pocket PC or PC**



## IES Ingenieurbüro für Elektronikentwicklung und Spezialgerätebau

Postanschrift  
Osterholzweg 26  
D-38110 Braunschweig

FON +49 5307 911130  
FAX +49 5307 911131

Bankverbindung Postbank Hannover  
BLZ 250 100 30, Konto 905 693 302  
UStIDNr. DE 177335140

## Specifications

Metrics	
Dimensions	25 x 12 x 10 mm <sup>3</sup>
Weight	5 grams plus cable
Cable	1.5 m long, black PUR, 3-pole Lemo 0B connector, custom cable length possible
Mounting screws	max. diameter 2.2 mm (use M2)

Environment	
Temperature range	operation 0...50 °C, specified performance 15...35 °C
Acceleration	500 g shock proof in any direction

Electrical Interface	
Power supply	5 V, 6 mA
Data transmission	single wire bus with 5 V logic level serial data
TEDS information	bus address, serial number, calibration values, calibration date, measurement location, mount and orientation info

Measurement Performance	
Tilt measurement range	+/-80°
Tilt measurement resolution	0.1°
Noise	<0.05° rms
Tilt repeatability	0.1°
Nonlinearity	+/- 0.2° or +/- 1% reading
Temperature induced error	0.1° typ. between 15°C and 35°C under steady state conditions
Temperature measurement range	0 ...50°C
Temperature measurement resolution	0.1°C

## Ordering information: IES 1402

Also available:

IES 1401H	Temperature and humidity data logger
IES 1404	Advanced temperature and humidity data logger
IES 1401I232	Interface adapter for PC or pocket PC (RS-232 Interface)
IES 1401IUSB	Interface adapter for PC (USB Interface)
IES TiltView	Display- and documentation software for PC or PPC

Information is provided without warranty and is subject to change without notice. We reserve the right to make changes whenever necessary to improve to the product.

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