

# NS/E2 Dual Axis Inclinometer

## Dual Axis Inclinometer

Measurement Range +/- 5°, 10°, 15°, 45°

### DESCRIPTION

**NS/E2 Dual Axis Inclinometer** - This dual axis inclinometer uses two single axis, tilt sensors. The sensor operates on the conductivity principle. The electronics measure the electrical stray field that is formed by applying AC voltage to planar electrode structures that are immersed in electrolytic fluid. When the sensor is tilted, the fluid level changes over the measuring electrodes; and, as a result, the conductivity with respect to the stray field changes. Using a differential measurement principle, the tilt angle and the tilt direction can be measured.



### FEATURES

- ◆ Dual Axis Analog Outputs
- ◆ Excellent Zero Repeatability (low noise at zero crossing)
- ◆ Excellent Cross-Axis Rejection
- ◆ Small OEM Package
- ◆ Light Weight
- ◆ Low Cost
- ◆ +/-5 to +/-45 Degree Ranges
- ◆ Low Temperature Sensitivity
- ◆ Simple Integration
- ◆ Relatively Insensitive to Vibration

### APPLICATIONS

- ◆ Platform Leveling
- ◆ Antenna Alignment
- ◆ Machine Tool Leveling
- ◆ Front-End Alignment Equipment

### Specifications:

Temperature stability	
Zero point	0.1° for 0°C.. 50°C
Sensitivity	0.3° for 0°C.. 50°C
Output signals	0.3V (-5°) to 4.7 (+5°)
Operating temperature range	0°C... +70°C
Storage temperature range	-40°C... +85°C
Supply Voltage	+12... +24VDC
Current consumption	ca. 9 mA

Position Sensors Technical  
Support:  
Tel: 757-766-4348  
Fax: 757-766-4297  
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**measurement**  
SPECIALTIES

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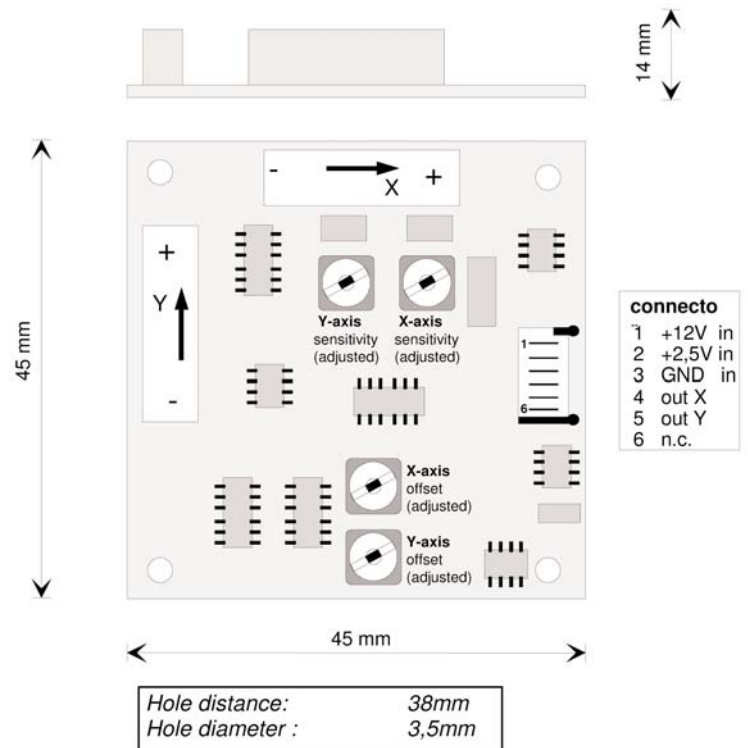
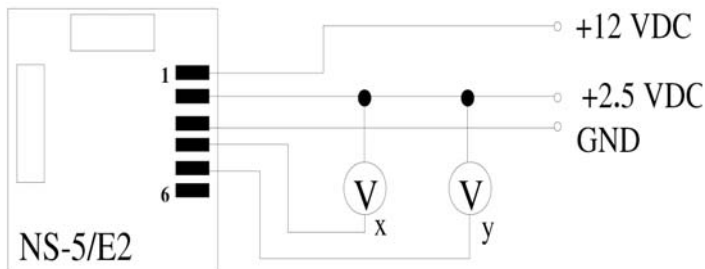
## performance specifications

Available Models	Measurement		
	Range	Accuracy	Resolution
NS-5/E2	+/-5degrees	0.03° for -3° to +3° 0.03° for -3° to +3°	0.001°
NS-10/E2	+/-10degrees	0.03° for -3° to +3° 0.08° for -10° to +10°	0.001°
NS-15/E2	+/-15degrees	0.03° for -3° to +3° 0.08° for -10° to +10°	0.001°
NS-45/E2	+/-45degrees	0.9° for -45° to +45°	0.01°

## Pin out

1	Vcc (+12V..24V in)
2	V <sub>ref</sub> (+2,5V in)
3	GND
4	V <sub>out</sub> X-Axis
5	V <sub>out</sub> Y-Axis
6	N.C.

## Application



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# Distribuidor

Brasil e América do Sul

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Metrolog Controles de Medição