

## NS/P Single Axis Inclinometer

The NS/P single-axis inclinometer is a member of a family of high performance, competitively priced, single and dual-axis inclinometers. The heart of every HL Planartechnik inclinometer is a small, state-of-the-art, inclination sensor. The sensor, which is comprised of a molded, ceramic case bonded, via a glass sealing process, to a ceramic substrate. Thin film, platinum electrodes are deposited on the substrate. Then the chamber is partially filled with electrolytic fluid and hermetically sealed.

The molded, ceramic, sensor housing combined with a precise, planar electrode geometry yields excellent performance and consistent part-to-part uniformity.

All P-type inclinometers are microprocessor controlled transducers capable of producing a linearized RS-232 digital or analog voltage output. With their machined, aluminum baseplate and IP 65 housing, they are an ideal choice for a variety of industrial, automotive and aerospace applications.

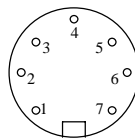
### Applications

- Zero point detection
- Aligning and level control
- Angle measurement

### Advantages

- Wide range of application
- Low vibration sensitivity
- Higher Precision

### Pinout



1	+Ub	Supply Voltage
2	GND	Ground
3	Earth	Earth
4	Output	+/- 1.5V ratio metrically around about GNDx
	Analogue Ux	
5	GNDx	Ground for analog voltage signal Ux
6	Input	RxD
	digital RS232	
7	Output	TxD
	digital RS232	

### Specifications

Range:	$\pm 5^\circ$	$\pm 15^\circ$	$\pm 45^\circ$
Precision:			
analogue:	$\pm 0.05^\circ$	$\pm 0.05^\circ$	$\pm 0.05^\circ$
digital:	$\pm 0.01^\circ$	$\pm 0.01^\circ$	$\pm 0.05^\circ$
Resolution:	0.0005°	0.001°	0.003°
Temperature stability:			
Zero point:	$< 5 \cdot 10^{-4} / ^\circ\text{C}$		$< 2 \cdot 10^{-3} / ^\circ\text{C}$
Sensitivity:	$< 1 \cdot 10^{-3} / ^\circ\text{C}$		$< 5 \cdot 10^{-3} / ^\circ\text{C}$
Analog Output:	+/- 1.5V around GNDx		
Digital Output:	RS-232 in degrees		
Transmission rate:	2400 or 9600 Baud		
Format:	ASCII		
Operating temp. Range:	-25°C ... +85°C		
Storage temp. Range:	-40°C ... +85°C		
Supply voltage:	+5VDC ... +24VDC		
Current consumption:	ca. 35 mA		
Protection class:	IP 65		
Connection:	Connector or Pigtail		

### Dimensions (mm)

