



The ITS-2-45 combines a dual axis (pitch and roll) inclinometer sensor with a remote readout unit that can simultaneously indicate both angles up to a maximum of ±45° with a resolution of 0.1°. The display unit also contains two relays which can be operated at a pre-programmed angle in the X and Y axis.

Features

- Dual axis measurement
- Simultaneous readout of both X and Y (pitch and roll) axes
- ±45° measurement range
- 0.1° display resolution
- ±0.5° accuracy
- Two independent programmable tilt switches
- Sensor sealed to IP67
- Can be supplied with cable lengths up to 100m



Product Description

The Sensor Unit : The sensor comprise a MEMS sensor, signal conditioning and microprocessor circuit mounted in a cast metal housing. The output is a serial digital interface ensuring data accuracy between the two units. The electronics are fully encapsulated giving an IP67 seal rating. The cable from the sensor to the display unit is 10m long as standard, but can be up to 100m on request.

The Display : The display unit contains two high contrast LCD readouts, one for each of the X and Y axis. They display the angle between ±45° with a 0.1° resolution. It also houses two relays which are used as programmable tilt switches, one for the X and one for Y axis. The tilt thresholds are programmed vial the front panel buttons, and when these tilt thresholds are reached, the relays are operated and the contacts closed. There is independent control for each axis. These relays can be used to sound an alarm, switch on a warning light, or provide feedback to a control system. It is also possible to calibrate the zero position using the front panel buttons.

Specifications

Part Number	ITS-2-45
Range	±45° - Dual Axis
Resolution	0.1°
Accuracy	< ±0.5° (at 20°C)
Accuracy	< ±1° (-20 to 60°C)
Display Refresh	5Hz
Supply Voltage	9-36V (DC)
Operating Current	<80mA (@12V)
Cable Length	1-100m (specify with order)
Sensor Sealing	IP67
Relay Rating	1A @ 30Vdc, 0.5A @ 125Vac
Dimensions	
Sensor	46 x 41 x 13mm (w x d x h)
Display	72 x 72 x 120mm (w x h x d)
Weight	
Sensor	60g
Display	400g
Operating Temp	
Sensor	-40 to 85°C
Display	-20 to 60°C

Product Drawings

