

DIGITAL TILT SENSOR



The Geosystems dual-axis tiltmeter designed for semi-permanent installation in either a borehole or surface application. The technology is based on an electrolytic tilt sensor that has a range of ±2° and an on-board digital temperature sensor. Each instrument is individually calibrated with coefficients stored in the micro-controller memory.

The RS485 output signal is an ASCII encoded message that includes the unique Sensor ID, the Sensor Type as well as the temperature and tilt data. This eliminates the necessity for expensive analogue-to-digital conversion so that the low-cost readout unit outputs data in real world units (arcdeg and °C). Readings can also be made using the USB port of a PC or web-book computer. A Real-time Plug 'n Play network of sensors can be built in minutes. Long term, low power recording is possible with our digital loggers. These features make our solutions significantly more cost effective and powerful than competing products.

FEATURES

- Dual axis Electrolytic tilt sensor ±2arc degree range
- ASCII encoded RS485 Output signal
- Digital Temperature sensor
- On-board digital signal processing (Temp. comp. and digital filter)
- High Resolution (0.001arc deg) & absolute accuracy (0.025 arc deg)
- Robust RS485 output signal transmits over 1000ft
- Micro-controller stores sensor ID & Calibration Coeffs. in Flash EEPROM
- Suitable for moderate-high resolution applications
- High survivability following blasts and vibration
- Readout using Manual Interrogation Unit
- Automatic sampling over Ethernet or WiFi running TCP/IP
- Competitively priced