

Submersible Tiltmeter (MEMS)

Description

The system consists of an adjustable universal mounting bracket that can be installed vertically, horizontally, or at an angle, an interconnecting cable, and a data logger or readout instrument. The housing is IP68 rated up to 2 MPa. for maximum resistance against water ingress. The cables are securely encapsulated inside the housing with water-proof connectors to provide watertight performance at depths up to 200 meters submersion. Bussed and non-bussed versions are available to accommodate daisy chained and single point installations.

Tiltmeter / Submersible Tiltmeter (MEMS) Specifications

ITEM	SPECIFICATION
Range	±30°
Resolution	±0.0002° (0.004 mm/m) ¹
Sensor Precision	±0.0013° (0.02 mm/m) ¹
Sensor Precision	±0.0005°(0.01 mm/m) ²
Sensor 24hr Stability	±0.03 mm/m ¹
Sensor 24hr Stability	±0.01 mm/m ²
Sensor	MEMS Accelerometer
Temperature Dependent Uncertainty	±0.016 mm/m/°C (±0.001°/°C), for ±5° from vertical
Temperature Dependent Uncertainty	±0.033 mm/m/°C (±0.002°/°C), for ±15° from vertical
Temperature Accuracy	±0.5 °C (0 °C to 60 °C)
Temperature Accuracy	±1.0 °C (-40 °C to 60 °C)
Temperature Resolution	0.06 °C
Operating Temperature	-40 to 60 °C (-40 to 140°F)
Dimensions	ø28.6mm x 211mm (ø1.125" x 8.31")

¹: 99% Confidence Interval ²: 68% Confidence Interval

SPECIFICATIONS