

In-Place Tiltmeter

Description

RSTâ??s In-Place Tiltmeters (MEMS) measure tilt in two axial planes perpendicular to the surface of the base plate. The unit is intended to be permanently installed to provide long term observation with maximum resolution and sensitivity, and is conveniently designed for manual monitoring or remote data acquisition. The system consists of a tiltmeter mounting plate, interconnecting cable, and data logger or readout instrument. The electronics are housed in a NEMA 4X (IP-65) enclosure for environmental protection, and is typically bolted or bonded to the structure. For maximum resistance against water ingress, the cable is typically hard wired to the enclosure. The interconnecting cable is suitable for direct burial.

SPECIFICATIONS

ITEM SPECIFICATION

Range ±30°

Resolution 0.0002° (0.004° mm/m) Sensor Accuracy ±0.002° (0.03 mm/m)¹

 $\hat{A}\pm 0.0013\hat{A}^{\circ}$ (0.02 mm/m) \hat{A}^{1} $\hat{A}\pm 0.0005\hat{A}^{\circ}$ (0.01

Sensor Precision mm/m)Â²

Sensor

MEMS (Micro-Electro-Mechanical Systems)

Accelerometer

Operating Temperature -40 to 60°C (-40 to 140°F)

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

SPECIFICATIONS