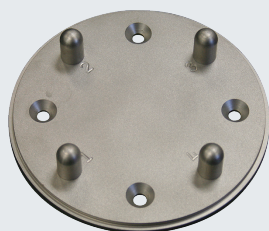




RST Portable
MEMS Tilt Meter
with Tilt Plate.



TILT SENSOR SPECIFICATIONS

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

ELECTRICAL

ITEM	PART #
Supply Voltage	5 to 15V DC
Operating Current	490 uA (Reading Average, per sensor)
Standby Current	<20uA (per sensor)
Signal Output	RS485 Digital Bus (MOD-BUS RTU Protocol)

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



PRODUCT CATEGORY:
INCLINOMETERS + TILT SENSORS

Portable Tilt Meter

The RST Portable Tilt Meter utilizes a MEMS tilt meter to measure tilt in either one or two axial planes perpendicular the surface of the base plate. The output is a digital output and is directly proportional to the sine of angle of tilt. In the horizontal position the DC output is zero. Portable MEMS Tilt Meters require placing the tilt meter in a reproducible position on a reference plate attached to the surface being monitored. It is designed for applications where a large number of measuring points are to be observed.

Portable MEMS Tilt Meter systems consist of the tilt meter mounting inside a stainless steel bracket and stainless steel tilt plate. Tilt plates are bolted or bonded to the structure to accurately, and repeatedly, locate the sensor.

> APPLICATIONS

Monitor tilt of retaining and building walls.

Tilt of concrete dams.

Ground subsidence.

Building safety along adjacent excavations.

Bridge piers.

Applications where the failure mode is expected to have a rotational component.

> FEATURES

Horizontal or vertical applications.

High accuracy and repeatability.

Readout units and portable sensor are lightweight and easy to use.

> BENEFITS

✓ Increase Safety

✓ Increase Productivity

✓ High Reliability

✓ High Accuracy

ORDERING INFO

ITEM	PART #
Portable MEMS Tilt Meter - Digital Output (horizontal/vertical)	ICTS0005B
Tilt Plate	ICTS0010