



RST Portable
MEMS Tilt Meter
with Tilt Plate.



TILT SENSOR SPECIFICATIONS

ITEM	DESCRIPTION
Range	±15°
Resolution	±2 arc sec. (±0.0006°) (0.01 mm/m)
Non-linearity	±0.0125% F.S. (±0.002°) (0.03 mm/m)
Repeatability	±0.0125% F.S. (±0.002°) (0.03 mm/m)
Sensor	MEMS (Micro-Electro-Mechanical Systems) Accelerometer
Material	Stainless steel / Aluminum NEMA 4X (IP-65) weather proof enclosure
Weight	10.38 lbs (4.710 kg)

TILT PLATE SPECIFICATIONS

ITEM	SPECIFICATION
Material	316 stainless steel
Dimensions	5.5 in. OD x 2.5 ID x 0.95 (140 x 63 x 14 mm) 4 pegs equally spaced on 4 in. (102 mm) dia.
Weight	1.7 lbs (0.77 kg)
Installation	Epoxy or mechanical 4 x ¼ mounting holes on 4 in. (102 mm) dia.



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 and stainless steel tilt plates. 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)	ICTS0005
Tilt Plate	ICTS0010