

GT-INC-MD Digital Inclonometer System



Application

- Landslide
- Unstable Slopes
- Dam Embankments
- Landfills
- Slurry walls
- Cassions
- Piles
- Sheet Piling
- Tunnels

Introduction

The Model GT-INC-MB Digital Inclonometer System is entirely delivered, includes a digital inclinometer probe (containing electronics to convert the analog voltage into a digital signal). The probe's signal is transmitted by the control cable to the cable reel (containing the Interface) via Bluetooth® wireless technology to the Android Devices.

Operation Manual

Using grooved inclinometer casing to engage and hold the spring-loaded wheels of the probe in a known orientation is the conventional way that clinometer surveys are conducted. Firstly, the probe is connected to the cable and lowered to the bottom of the casing whereupon it is raised in increments to the top of the hole. A reading is taken of the amount of tilt of the probe away from the vertical at each increment.

Operation Manual

Good Performance: Providing an excellent accurate solutions and easily to stable. That's how our measurement probe can make the measurement

Lightweight Cable: Easy to carry and easy to handle, the lightweight AT control cable is also easy to read, with large labels at every other graduation.

Excellent Tracking: Allowing the probe to track casing grooves through tight curves by its short length and top quality wheels advantages.

Compact Cable Gate: We have the unique cable gate aligns cable graduations precisely at the top of the casing. In case, the cable gate is forgotten, It will eliminate the potential for depth errors.

Measure APP: The Measure App is designed to be focus on the simplicity and system power. It can run on both certified Android and iOS devices. We provide The Measure App which supports the measurement data, touch interfaces can be showed in high resolution displays, but still keep easy operation.

Mechanical and Technical Specifications



Inclinometer Probe

The Model GT-INC-MB Inclinometer Probe has two MEMS tilt sensors oriented to measure tilt in two orthogonal axes over a range of +30 degrees. The probe contains A/D converter, which outputs a digital signal proportional to the sine of the angle of tilt. MEMS tilt sensors are capable of withstanding shocks as large as 2000 g. Nevertheless a rubber cushion fixed to the bottom of the probe helps to soften the blow of a probe inadvertently allowed to hit the bottom of the grooved casing - and care must still be exercised when handling the probe.

Wheels are self lubricated for longer life and the wheel assemblies are designed to be replaceable should wear become excessive.

The cable connector at the top of the probe is designed to be replaceable if it suffers damage or excessive wear. A protective cap is supplied to cover the connector when not in use.

Technical Specifications

Standard Range	±30°
Sensors	2 MEMS Sensor
Resolution (Probe)	0.0013 °
Resolution (System)	± 0.015mm/500mm
Accuracy	± 0.02% F.S.
Total System Accuracy	±3mm/30m
Temperature Range	0° to +55°C
Length x Diameter	610 x 25 mm
Weight	1.4 Kg
Maximum Cable Length	60, 100m

Cable Gates



Cable gate aligns graduations with top of casing.

Fits 48, 70, and 85mm.



Mechanical and Technical Specifications



Bluetooth Reel contains the Interface, external battery charger and Bluetooth wireless indicator light. The Interface converts the digital signal from the probe into a radio signal, which is transmitted to the Measure App (Android and iOS Device)

Technical Specifications

Battery > 40 hours continuous operation

Temperature Range 0° to +55°C

Measure App



Download

Using the Android, iOS device visit Google Play and iOS App Store search "Measure App"

Requirements

Android 5.0 and iOS 8.0 up

Technology



MEMS Technology



Wireless Communication



Easy Operation

Measure: Number of inclinometers and data measurement are limited only by device memory. Depth intervals are multiples of 0.5m. Graph Displays list of inclinometers. Tap to start a measure. It have auto-save function to make the measurement easier.

Graph: Large, readable characters. Shows active depth, depth last recorded, A and B readings in mm, checksums, and for any different time. Other features include easy depth changes and automatic bookmarks.

Data: Plots checksums, profiles, change-from-initial, and change-from-last in high resolution. Displays data table for inspection and corrections.

Export: Sends inclinometer data to PC as email attachments or syncs via Dropbox. If internet is not available, data files are transferred via USB cable and Windows file manager.