



ROSCTEST

PROFIL - Digital Inclinometer



EASY TO HANDLE
COMPATIBILITY WITH COMMON SIZES OF CASING
HIGH-RESOLUTION, TOUCH SCREEN INTERFACES

The PROFIL is used to monitor subsurface deformations of the ground in landslides, embankments and dams, and around deep excavations and tunnels.

Description

The system includes a digital probe, lightweight control cable, Bluetooth reel, cable gate, Profil Reader app, and Profil Manager software. The standard system includes a detachable probe. A system where the probe and the cable are permanently attached is available in option.

The Profil's major advantages are its sensor technology and mobile computing which bring simplicity to survey operations.

To start a survey, tap an inclinometer borehole from the list displayed by the Reader. Alternatively, simply scan the QR code that is fixed to the casing.

At each survey depth, the Reader prompts when a stable reading is ready to record. To record, simply pull the cable upwards to the next depth. The Reader senses motion and stores the stable reading in non-volatile memory. There is no need to hold the Reader or tap a button. Your hands stay free to work with cable and probe.

If the survey is interrupted for any reason, simply tap to resume at the same depth, with no loss of data.

When the survey is complete, plot checksums, profiles, and changes to validate the readings before you leave the site.

Afterwards, send surveys to the office via the Internet, using email with automatic file attachments or Dropbox for full synchronization. If the Internet is not available, use a USB cable for data transfers.

Key Features

- Easy to carry and easy to handle, detachable probe and lightweight control cable featuring numeric depth labels at every other graduation.
- Compatible with most common sizes of casing, the compact cable gate aligns cable graduations precisely at the top of the casing, eliminating the potential for depth errors if the cable gate is forgotten.
- Android supports high-resolution screens, touch-screen interfaces, and full Internet connectivity.
- The Reader app is central to the system's simplicity and power. QR codes, hands-free recording, bookmarks, useful field plots, and wireless data transfers
- The Profil Manager software stores data from the Profil system in a database, and generates graphs.

Applications

- Stability of slopes, embankments, and dams
- Deformation of sheet piles and diaphragm walls
- Ground deformation due to tunneling
- Movement of bridge piers and abutments
- Deflection of laterally loaded piles

Specifications

Probe	Metric	English
Tilt Sensors	MEMS x 2	MEMS x 2
Wheel Base	500mm	24"
Range	±30°	±30°
Resolution	0.005mm	0.0002"
Repeatability	±0.003°	±0.003°
Temp Rating	-20 to +70°C	-4 to +158°F
Material	Stainless	Stainless

Profil Pad Reader Application

OS: Android 4.0 and above.

Inclinometers and Surveys: Number of inclinometers and surveys are limited only by device memory. Maximum depth is 300 m / 1000 ft. Depth intervals are multiples of 0.5 m or 2 ft.

Survey Screen: Large, readable characters. Shows active depth, last depth recorded, A and B readings in mm, inches, or classic units, checksums, and progress bar. Record button prompts user to wait, tap, or pull (in hands-free mode).

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

Send: Transfers files from the Reader via Internet connection. Modified files (new surveys) are automatically attached to an email. Dropbox transfers are more automated, requiring no action at the destination.

Profil Pad Reader Application

Download the Profil Reader app and updates from the Google app store: play.google.com.

Profil Manager Software

Download Profil Manager from the Downloads section of www.roctest-group.com/support/downloads.

Android Reader (Standard or Rugged)

The optional Android Reader is a certified Android-based tablet supplied in factory packaging. See our website for complete list of devices. Currently certified tablets include fully rugged Panasonic ToughPad, which is suitable for all environments, and the Google Nexus 7 and Galaxy Samsung, which are suitable for moderate environments.

Ordering Information

The system includes a digital probe, lightweight control cable, Bluetooth reel with international AC adaptor, cable gate, Profil Reader app and Profil Manager software (to be downloaded). Reader device is not included and must be ordered separately.

Cable

Graduations: Graduations are measured from top wheels of probe. Metric cables have 0.5-m graduations with numeric depth labels every meter. English cables have 2-foot graduations with depth labels every 4 feet.



Standard Lengths: 30, 50, 75, 100 m / 100, 150, 200, 300'. Other lengths available. Every control cable is 3 m (10 feet) longer than its listed length.

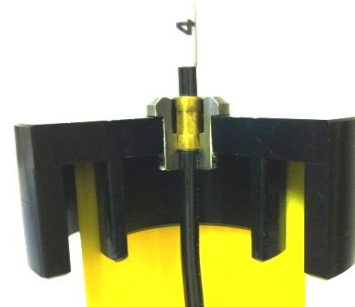
Construction: The four-conductor cable has a Kevlar strain membrane, and polyurethane jacket.

Cable Gate Specifications

Index Point: Cable gate aligns graduation with top of casing.

Casing Compatibility: Fits 85, 70, and 48-mm casing (3.34, 2.75, and 1.9-inch casing).

Diameter: 102 mm (4").



Bluetooth Reel Specifications

Controls: On/Off switch, LEDs for power, charge state, and Bluetooth. Timed auto-off.

Power: Internal battery provides 40 hours of operation. Charge time is about 5 hours.

Optional Accessories

- Reader device: Standard tablet or rugged ablet
- Backpack