



**EASY TO OPERATE PRESSUREMETER
REAL TIME READING AND PLOTTING OF TEST RESULTS
RUGGED CONSTRUCTION**

The TEXAM^e is the new electronic version of the TEXAM pressuremeter in which the pressure and deformation are measured with electrical sensors and read with a tablet-operated readout.

Description

The **TEXAM^e** pre-boring pressuremeter is a rugged and reliable instrument that can be used for various ground engineering applications. This pressuremeter distinguishes itself by its ease of use and versatility. Loading is done manually with a screw jack, which allows the user to run tests in either strain or stress controlled steps. The manually-controlled hydraulic loading system ensures a good repeatability of the test, while making unload-reload cycles very easy. The new electronic version of the TEXAM pressuremeter makes general operation of the equipment even easier and repeatable.

This equipment includes the following parts.

A **control unit** houses electrical pressure and volume sensors, connectors, a control valve and a manual actuator (screw jack) for pressurizing the water in the cylinder via a piston.

A **readout unit** consists of the DP Box unit operated with an Android tablet. This versatile readout is compatible with other pressuremeters manufactured by Roctest. A special application, installed on the tablet, allows configuring the tests and calibrations, to read and plot the test results in real-time, to log the data, and to review test results.

A water-filled **probe** is fitted with an easy-to-replace single outer sheath. This sheath consists of rubber typically protected with metallic fins.

And finally an easy-to-repair, high-pressure **tubing** connects the probe to the control unit.

Key Features

- Electronic version of the TEXAM
- Easy to operate and maintain
- Rugged construction
- Controlled rate of deformation or pressure
- Conforms ASTM D4719-07
- Safe : no compressed gas necessary
- Versatile: Easy cyclic or creep testing
- Automatic acquisition & real time visualisation for enhanced control of the test on an Android tablet*

Applications

- Bearing capacity and settlement estimation of all types of foundations
- Deformation of laterally loaded piles and sheet piles



Specifications

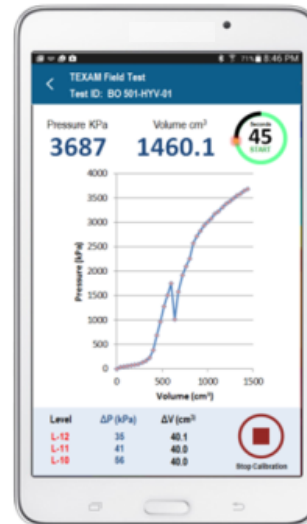
Control unit

Working pressure	10 000 kPa (1500 psi)
Dimensions	40 x 46 x 125 cm (l x w x h) assembled
Weight	30 kg / 28 kg (Box / Actuator)

D/P BOX Readout unit

User Interface	Bluetooth communication with an Android tablet
Resolution	1 kPa and 0.01 cm ³
Power Supply	2 x 12 V, 2.3 A, rechargeable batteries
Dimensions	25 x 28 x 12 cm (l x w x h)
Housing	Splashproof, resistant ABS case
Autonomy	> 8 hours typically
Power supply interface	Universal AC wall plug with US/ Euro adapter + adapter cable for car (lighter) & for external battery

Note: D/P BOX & Android Tablet sold separately



Typical Pressuremeter Test Results

Probe

Diameter	74 mm (N Long) / 44 mm (A)
Length	72 cm / 84 cm
Weight	6.4 kg / 4.5 kg
Max radial expansion	35 %

Test Procedure

The probe is placed at the test depth in a pre-drilled borehole obtained by a method adapted to the soil conditions: wet rotary drilling, augering, shelby tube pushing, etc. In granular soils below the water table, the probe can be driven directly within a slotted casing. The test is run either with a constant rate of deformation by using a uniform rate of rotation of the actuator, or with equal increments of pressure as for the Menard pressuremeter test.

Test Results

An in-situ stress-strain curve is obtained by plotting the injected volume against pressure. The main parameters yielded from the test readings are the Pressuremeter Modulus, Creep Pressure, and the Limit Pressure. A tool (TexamCompanion) developed by Roctest can be used for that purpose.

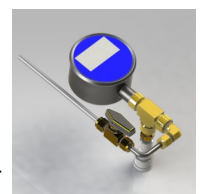
Ordering Information

Please specify:

- Tubing length (25, 33, or 50 m)
- Probe diameter
- Accessories (metallic sheaths, rings) and optional items

Optional Accessories

- A high-precision digital gage kit to be connected on the front panel as a backup reading.
- A mechanical volume counter to install on the handle shaft, also for backup reading.
- A slotted casing assembly compatible with A-size probe, for use in difficult soils (gravely soils).



Digital Pressure Gage Kit

Note that the **TEXAM^e** is compatible with the BOREMAC and PENCEL Probes - see separate brochures for more details.