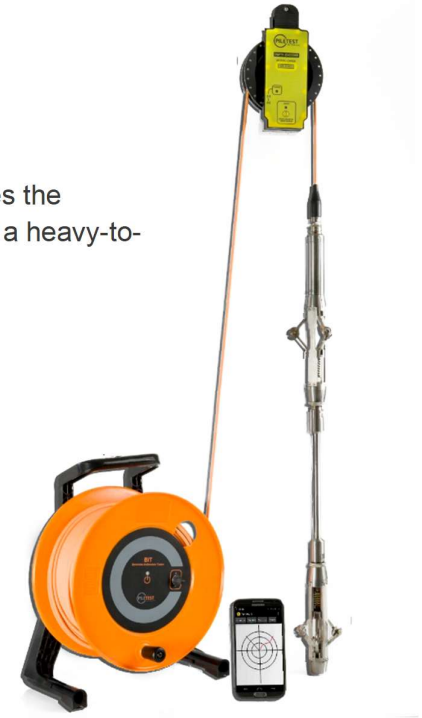
PILETEST
Take a Deeper Look

BIT

Borehole Inclination Tester

BIT measures the verticality of a borehole AND of existing piles. BIT uses the auger/bucket as the centralizer in the borehole. Eliminating the need for a heavy-to-move system.

- No expensive inclinometer tubes.
- Lightweight 1-person simple operation
- Works on any diameter
- ASTM D8232-18 Standard compliant



Applications

Measurement of inclination is required to ensure the deep foundation (vertical or raked) stays within the allowable deviation, typically 2%. More stringent requirements are often specified for diaphragm and secant walls to ensure that there are no gaps in the wall and that the bottom of the wall is in the correct location. Inclination measurement is also utilized in deep wells for various applications.

Easy to Operate Inclination test for Borehole and Pile Foundations Diaphragm and Secant Walls

Reliable

- 100% QA tests at 16-atmosphere pressure, vibration, and extreme temperature.
- The BIT sensor can tolerate the harsh conditions of the borehole and drill machine.
- 3-year warranty!
- Rugged connectors, cables, sensors.

Easy to Use

- One operator can handle the lightweight BIT and the inclination test.
- Easy and Simple to use Android software App.
- 3D borehole visual for augmented reality experience in locating inclined borehole position.

Top Performance

- 0.1% accuracy.
- Check the inclination of a 50m borehole in less than 20 minutes.
- Works on any diameter.
- Use simple PVC tubes instead of expensive grooved test tubes.
- Test in metal casing, with magnetic agnostic sensor
- Weighs under 13Kg

Get a Quote

BIT – Technical Specification

Physical	**Housing**	Rugged, Environment-proof, water-resistant housing.
	Dimensions	430mmL x 325mmW x 105mmH (instrument only)
	Weight	6.0 kg (instrument with 80m cable) 7.0 kg (CSL centralizer) 13.0kg (Typical shipping)
	Temperature range	Operating: -25°C to 60° Storage: -40°C to 70°C
	Humidity	90% (non-condensing)
	Waterproof	Sensor: IP67, Protection against complete submersion Instrument: IP62, 90% condensation (light rain)
Power	**Internal**	Rechargeable Lithium Ion battery, 7.4 V 500mAh, (Supports a full day of typical use)
	External	100-240V AC operation/charging
Standards	**ASTM D8232-18**	Meets or exceeds
Technical	**Wireless**	Bluetooth, 2.4Ghz.
	Depth meter	Wireless (Zigbee) with internal 1400mAh battery and magnetic charger adapter
	Inclinometer	MEMS, dual axis, temperature-compensated MEMS
	Gyro	Automatic drift compensation
	Cables	80m (150m optional) rugged Polyurethane
Performance	**Borehole depth**	5m-140m
	Borehole diameter	Unlimited
	Productivity	10-20 minutes/borehole (Typical)
	Accuracy	Inclination: 0.1% (0.07°) Depth: 0.05m
Output	**Reporting**	Produced on office PC, including top view of pile axis, a vertical section in the direction of maximum inclination and more
Requirements	**Computer** (Minimum)	Windows Win7/Win10/Win11. 1024x768 resolution min.

BIT – Accessories

Accessory Name	Description	Comment
28 – Centralizer		BIT sensor diameter rod
40-60 Centralizer		CSL tube centralizer for diameter 40-60 mm (1.5”-2.5”)
60-100 Centralizer		Pile tube centralizer for diameter 60-100 mm (2.5”-4”)
100-150 Centralizer		Pile tube centralizer for diameter 100-150 mm (4”-6”)
200-400 Centralizer		Pile tube centralizer for diameter 200-400 mm (8”-16”)
Bucket Adapter KIT		Kit to connect the BIT sensor to the drill bucket, when the drill bucket is the centralizer. Contains: Precision Level + Mounting base + Mounting arms
Spare Mounting arms		Mounting arms are welded to the bucket. You can buy more for new projects where the bucket is the centralizer
Precision Level		The BIT Precision Level ensures the sensor is mounted correctly for precises measurement of the inclination. Locks on the BIT centralizer or mounting base
Mounting base		The mounting base, allows connecting and disconnecting the BIT sensor from the bucket (centralizer), while keeping the leveled welded base in place