



## Inductance Settlement System Model 5115-RT-IDELEX

### FEATURES

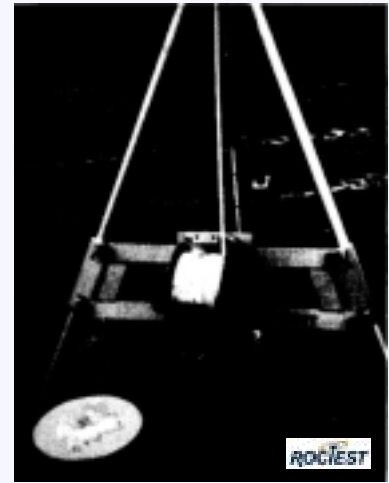
- Measures settlement, heave and lateral movement
- Rugged, reliable and accurate
- Adjustable detection threshold with audio and visual signals
- Tripod with mounting plate and vernier or borehole collar installation support (optional)

### APPLICATIONS

The IDELEX System has been designed to be an accurate and inexpensive instrument for measuring settlement and heave, strain or deflection occurring in general mining and civil applications:

- Excavations
- Plant construction
- Embankments of soil or rock
- Dams
- Backfill operations
- Piling of mining residue

The IDELEX System can be easily adapted to almost any field conditions, from soft clay to rough embankments. Horizontal displacements can also be monitored.



### Description

A complete RocTest Model 5115-RT-IDELEX System is comprised of:

- The readout unit, mounted on a portable reel assembly, with the inductance probe, the graduated electrical cable, the batteries and the instrument controls
- The tripod frame or borehole collar installation support (optional), mounted with a precision sliding gauge (vernier) and an adapter to receive the readout reel.
- The access tubings (many types available)
- The reference rings

The electronic probe circuitry detects the location of the reference metal rings based upon the principle of induction. The readout unit gives a 2-way indication of the interception of the probe with the reference rings: a buzzer and a galvanometer, both with variable intensity of detection. The buzzer is helpful in locating the ring quickly, and the galvanometer may be used to locate with precision the maximum signal. The reference rings

can be metal rings, plate or wire loop fixed around the plastic casing that will follow the soil movements. They can be installed along vertical or horizontal casings, in boreholes or by direct burial.

### Reference Rings

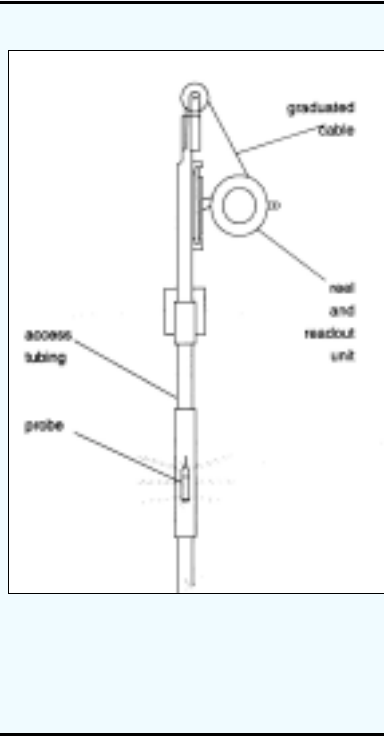
Stainless steel rings may be mounted on:

- PVC tubings mounted with telescopic couplings, with a normal diameter of 51 mm, allowing displacements of up to 40 cm per coupling.
- Flexible corrugated polyethylene tubings, with a nominal diameter of 76 mm, allowing a movement of 30% to 50% of the tubing length.
- Standard inclinometer plastic casing with telescopic couplings.

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### Readings and Interpretation

Readings are taken manually by lowering the probe into the casing and locating the general position of the metal rings with the buzzer. The precise location of the probe is then evaluated with the vernier when a maximum signal reading is obtained on the galvanometer. The sensitivity of detection may be adjusted by means of a knob on the front panel.



### Ordering Information

**Please specify:**

- Cable length
- Type of access tubing
- Tripods with mounting plate
- Borehole collar installation support

### Specifications

<b>Probe diameter:</b>	35 mm O.D.
<b>System resolution:</b>	0.5 mm
<b>System accuracy:</b>	± 1.0 mm
<b>Electrical cable:</b>	50 m standard flat cable graduated in cm. Other lengths available on request
<b>Batteries:</b>	three 9V alkaline
<b>Battery life:</b>	8 – 10 hours
<b>Weight:</b>	± 6 lbs

Due to on-going design improvements and reviews, we reserve the right to amend product and specifications without prior notice



FOR FURTHER INFORMATION

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