

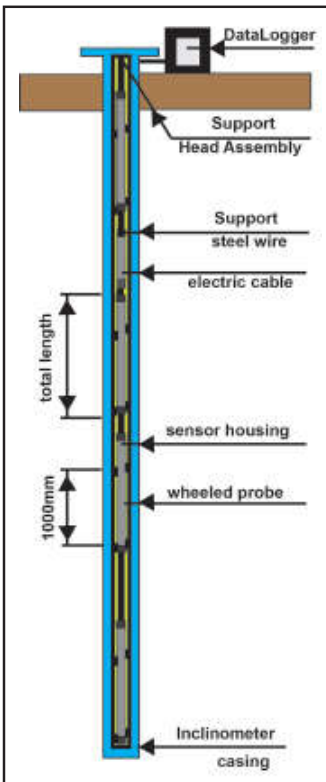
### GT-IPI In-Place Inclinator



Based on installation orientation, Geotech Science has designed and manufactured In-place Inclinator in two types. GT-IPI-V for monitoring lateral ground movement is installed vertically inside monitoring casing, and GT-IPI-H for monitoring ground settlement is installed horizontally within inclinometer casing.

GT-IPI system consists of a string of linked inclinometer probes installed and fixed inside inclinometer casing at certain depth. The inclinometer probe is magneto-resistive and has IP68 waterproof. For real time monitoring, GT-IPI could be readily connected to GT-1000 datalogger or other acquisition system to obtain measurement data periodically.

### Operating Principle



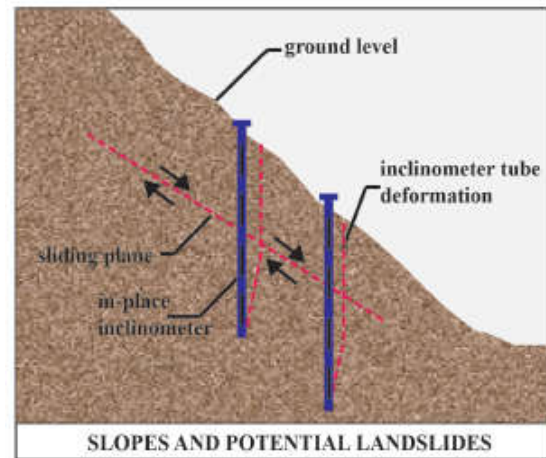
In-place Inclinator system consists of a series of inclinometer probes. Using inclinometer casings, it can be either installed horizontally beneath road or embankment, or installed vertically within retaining walls or ground slope. The Inclinator casings have internal grooves to control and ensure the orientation of probes.

A system of In-place Inclinator contains several probes. Each probe is fitted using a placement rod which connects two probes together by a universal coupling, allowing articulation of the entire in-place inclinometer string. Placement rods are available in 1, 2, 3 meters length, and are supplied with threaded couplings for extension and attachment to probes, universal joints. An electrical cable connects between each inclinometer probe and datalogger system.

## Example of Applications

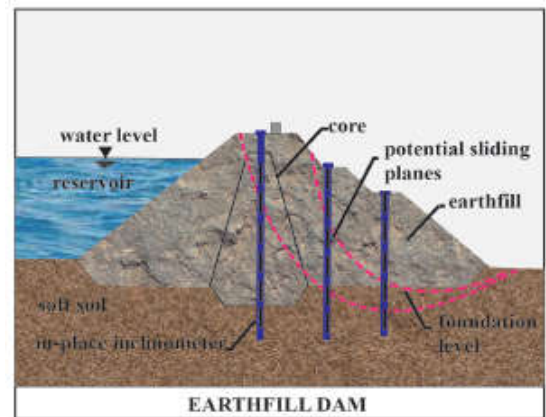
### 1. Slopes and Potential Landslide

- Monitor the movement of shear zones,
- Monitor the stability of slopes and landslides
- Estimating type of shear (planar, circular),
- Calculate rate of movement (accelerating, decelerating)



### 2. Earthfill DAM or Embankments

- Monitor the movement in DAM body, particularly during impounding,
- Survey potential sliding planes and shear zones in foundation,
- Calculate rate of movement to control failures of slopes
- Assess stability of slopes during and after impounding



## Technical Specifications

Model	<b>GT -IPI In-place Inclinometer</b>
Measurement Axis	<b>Biaxial</b>
Measurement Range	<b>±15°</b>
Sensor Accuracy and Repeatability	<b>0.015% F.S.</b>
Sensor Resolution	<b>0.01% F.S.</b>
Excitation Voltage	<b>10-14VDC</b>
Operational Temperature	<b>0°C -60°C</b>
Material	<b>Stainless Steel</b>
Waterproof Grade	<b>IP68</b>
Diameter	<b>27mm</b>