# Bluetooth Portable Inclinometer System

Data Sheet

Inclinometer system with Android Smart Mobile Phone PDA





# Bi-Axial, Bluetooth Inclinometer

### Introduction

Adhar Instruments & Services (AIS) model AIS-1365 Inclinometers are widely used to monitor the deformation of slopes, embankments, dams, foundation pits and tunnels. By measuring the inclination angle of a sensor probe at different locations inside a casing, we're able to obtain data of soil displacement in vertical or horizontal direction. An inclinometer kit consists of a sensor probe, a mark cable and a smart mobile phone.

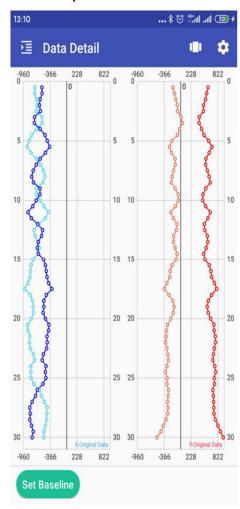
The inclinometer casing is usually installed in a vertical drilling hole through the unstable soil layer to the lower stable soil layer. The first observation can establish the initial section of casing movement, based on which the magnitude, direction and speed of soil displacement at certain locations can be measured through subsequent observations.

AIS-1365 is the latest Bluetooth inclinometer developed and manufactured. The measurement activities can be configured by an Android mobile phone, and data collected can be uploaded immediately to the phone. With the Android app, functions such as hole location, measurement, display, storage, alarm, data analysis and data import/export can be easily realized.

### **Features**

- anti-vibration
- stable and reliable
- high protection grade
- wide measurement range
- high resolution and accuracy
- portable, smart and user-friendly
- real-time data display and uploading

### **Data in Graphical form on Mobile**



# **Applications**

Measurement of lateral movement of:

- Slopes
- Embankments
- Dams
- Foundations
- Retaining walls
- Soil Filling

# Advantages

- Accurate, robust, high resolution and good long term stability.
- Capable of withstanding thermal shock without defeating performance.
- Free from signal effect due to cable length.
- Easy in data recording



# Complete System

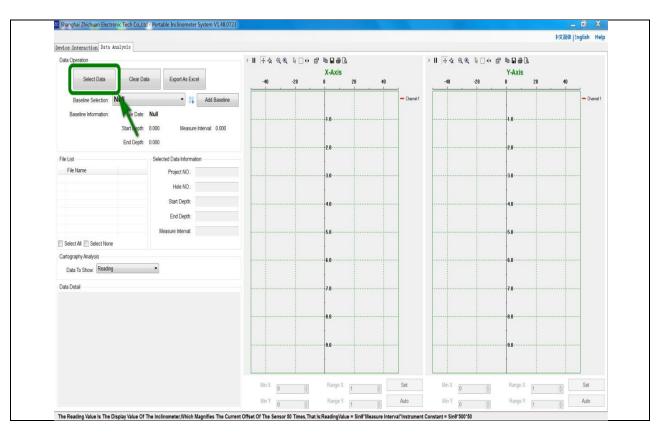
# :Specifications

AIS-1365 Portable Bluetooth Inclinometer System

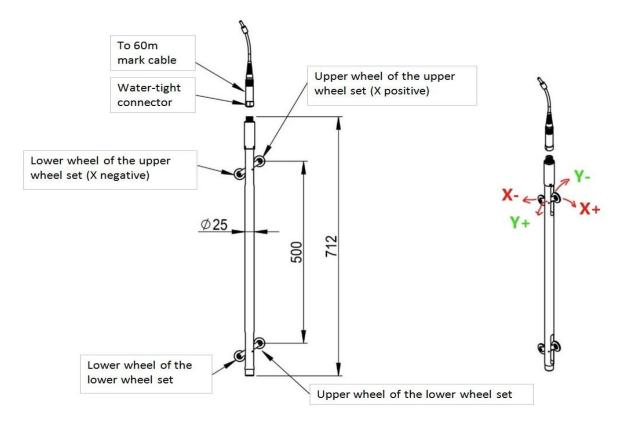
ltem	Conditions	Minimum Value	Typical Value	Maximum Value	Unit
Measuring range <sup>1</sup>		-15		+15	Degree
Resolution			0.001		Degree
			0.02		mm/m
Probe accuracy			±0.005		Degree
System repeatability <sup>2</sup>	30m		±1		mm
Protection grade <sup>3</sup>	Probe		IP68		
	Data Logger		IP67		

Cable	6.8mm dia		60		m		
Probe size	diameter * length		Ф25*710		mm		
Continuous working time	25° C		10		hour		
Operating and storage temperature <sup>4</sup>		-20		+70	° C		
Outer size	Packing without cable reel		985*425*175		mm		
	Cable reel		350*250*430		mm		
Gross weight	Without cable reel		15		kg		
			JB/T 12204-2015				
Standards		GB50026-2007					
		ISO18674-3-2017					

# **Software**



# **Probe Details**



# **Details of Bluetooth Panel**

