

Smart Inclinometer System

DIGITAL ADVANCED SENSORS **DAS**

SI-200

An inclinometer system is a survey instrument to measure displacement from inclinometer casing installed permanently in a borehole that passes through a zone that expected movement or already has such as a tunnel, a dam, a dike or many other kinds of construction sites.

- Excellent linearity-repeatability and accuracy.
- Very strong and durable 1-core stainless cable.
[Korean Patent No. 10-1766761]
- Automatical displacement calculating, data plotting and chart building.
- Anti-shock-anti-corrosion connector.
- Convenient operating with Bluetooth and Android OS.



SYSTEM SUMMARY

An inclinometer system SI-200 includes Inclinometer Probe, Data Cable, Bluetooth Reel, End-Cap, Data Reader and accessories.

Data from inclinometer probe is transmitted to the reader through the Bluetooth reel by wireless Bluetooth.

Connect the probe and cable, Bluetooth pairing the reel and the reader to survey. Survey with manual surveying order by the reader or using hands-free mode.

Recorded data from surveys can be exported to external USB storage, saved to internal storage or sent by e-mail.

Data file which exported by the app can be opened in a spreadsheet (such as MS Excel). Any calculating with factor is unnecessary for data. Data in data file is already calculated automatically to distance displacement.

APPLICABLE FOR...

- Stability of slopes, embankments and dams.
- Deformation of sheet piles, diaphragm walls.
- Ground deformation due to tunneling, boring.
- Movement of bridge piers and abutments.
- All of angular, distance displacement of all of constructions and civil engineerings.

FEATURES

- Inclinometer probe based on high precise MEMS inclinometer as Biaxial, -30 to +30 degrees maximum and 0.001 degree (=0.0087mm) resolution.
- Patented very strong, durable, thin and lightweight data cable consists of 1-core stainless steel wire cable (with braiding shields) to prevents breaking or any damages from frequent pulling and bending.
- Whole-new-designed connection between inclinometer probe and data cable provides convenient way to assemble the probe and cable and prevents any damages of pin terminals by corrosions.
- Touch screen interface with Android OS on the data reader provides convenient and efficient experience to operate the surveying system.
- Easy to carry & easy to handle.
- Data cable featuring numeric depth labels at every other graduation.
- Compatible with most common sizes of casing, End-cap aligns cable graduations precisely at the top of the casing and eliminating the potential for depth errors.

<http://das-co.com>



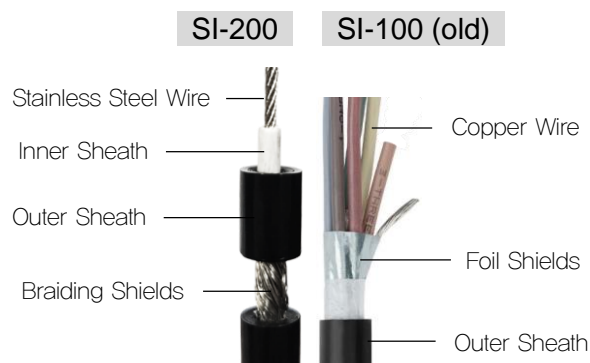
INCLINOMETER PROBE

ITEMS	SPECIFICATIONS
WHEEL BASE	500mm
INCLINOMETER	2X MEMS
RANGE	±30°
RESOLUTION	0.001°
REPEATABILITY	±0.002°
OPERATING TEMP.	-20 ~ +70°C
MATERIAL	Stainless Steel

BLUETOOTH REEL

Features : Bluetooth, Power Saving, Waterproof.
Switches&Buttons : x2 (Power, Bluetooth Reset)
Led Indicators : x3 (Power, Charging, Bluetooth)
Connectors : x1 (Recharging and debugging)
Durations : up to 25 hours continuously.
Recharger : +19VDC ; 2A / 100-260VAC 60Hz

DATA CABLE



	SI-200	SI-100 (old)
Core-Wire	Stainless Steel	Copper
Inner Wires	1	6
Wire Strength	Very Strong ◎	△ Weak
Thickness	ø5.5 ◎	△ ø10
Weight	Light ◎	△ Heavy
Outer Sheath	Polyurethane	
Graduation	Every 0.5m, Laser Marked	
Length	50m / 100m	

DATA READER & APP.

OS : Android OS 5.0+

Features : Touch screen interface, Wireless Bluetooth, Voice guidance, Hands-free mode, Plotting & viewing data, Data exporting.

Data Limit : Unlimited (depends on storage space of data reader)

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Basic Offer : 7in Tablet PC (Korean product)

※ The application is installed on the tablet PC supplied basically and it also can be downloaded on DAS website <http://das-co.com/>.

※ Please notice the application may not support all Android OS device

END-CAP

Install End-cap on top of the casing before start a survey and align cable graduations at the top of the casing during a survey for precise surveying.



For : Internal diameter of 50-60 millimeters.

Material : Black painted stainless steel

WIRE REMOTE BUTTON

Connect a wire remote button to ø3.5 earphone jack of the data reader, press the button instead of tap the screen.



If the reader is not the one which basically supported, unexpected crash error between other apps and the button may cause.

In this case, disable apps which using a play-button of a hands-free earphone such as Music, Google Search, ... in Settings of Android OS.

OTHER ACCESSORIES (Basic Offer)

- Armband (Waterproof pack) for 7in Tablet PC
- Backpack for carrying Bluetooth Reel and other accessories.



Specifications, design and components of the system can be changed without prior notice to improve its performances.

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