



Horizontal MEMS Inclinometer System



The Horizontal MEMS Inclinometer System measures settlement or heave under embankments, dams, roadways, storage tanks, and landfills.

A local microcontroller in the probe manages the data collection, applies precision digital calibration, and transmits the data in digital format for best of class accuracy.

An Ultra-Rugged Field PC functions as the data collector, providing a high-level user interface, industry-leading memory, optional Flash™ data security, “at-the-borehole” data analysis and comparison to previous data sets, and instant USB synchronization with office computers.

general specifications

ITEM	DESCRIPTION
Sensor Type	Uniaxial, MEMS (Micro-Electro-Mechanical Systems) Accelerometer
Memory	>1,000,000 readings
Measurement Range	±30° from Horizontal
Repeatability	±0.002°
Casing Size Required	70 mm (2.75") or 85 mm (3.34")
Materials	Stainless Steel
Readout	Ultra-Rugged Field PC

metric system: specifications

ITEM	DESCRIPTION
Data Resolution	0.005 mm per 500 mm
Repeatability	±0.002°
System Accuracy	±2 mm per 25 m
Wheel Base	500 mm
Probe Diameter	25.4 mm
Probe Length including lifting eye	708 mm
Temperature Rating	-40 to 70°C
Weight	1.091 kg

imperial system: specifications

ITEM	DESCRIPTION
Data Resolution	0.00002 ft. per 2 ft.
Repeatability	±0.002°
System Accuracy	±0.1 in. per 100 ft.
Wheel Base	24 in.
Probe Diameter	1 in.
Probe Length including lifting eye	32.19 in.
Temperature Rating	-40 to 180°F
Weight	2.4 lbs.

applications

Monitor settlement of heave under embankments, dams, roadways, storage tanks, and landfills.

Observation of ground movements caused by construction and excavation, such as those involved with tunneling.

features

Digital precision and efficient data collection with a high-level user interface that has instant USB synchronization with office computers.

Probe may be used with RST's Vertical In-place MEMS Inclinometer System.

Probe maybe purchased with or without a system.

metric system: ordering info

ITEM	PART #
30 m Complete System with 0.5 m Probe	IC32003H
50 m Complete System with 0.5 m Probe	IC32005H
60 m Complete System with 0.5 m Probe	IC32006H
75 m Complete System with 0.5 m Probe	IC32075H
100 m Complete System with 0.5 m Probe	IC32010H
150 m Complete System with 0.5 m Probe	IC32015H
Digital Horizontal 0.5 m Probe	IC32205H
Inclanalysis™ Digital Inclinometer Analysis Software with USB Key	IC35600
Pull Cable	IC7300
Pull Cable Reel	WL046617
Cable Return Pipe	EP050410
Return Pipe Coupling	EPFI429005

imperial system: ordering info

ITEM	PART #
100 ft. Complete System with 2 ft. Probe	IC32110H
150 ft. Complete System with 2 ft. Probe	IC32115H
200 ft. Complete System with 2 ft. Probe	IC32120H
250 ft. Complete System with 2 ft. Probe	IC32125H
300 ft. Complete System with 2 ft. Probe	IC32130H
500 ft. Complete System with 2 ft. Probe	IC32150H
Digital Horizontal 2 ft. Inclinometer Probe	IC32202H
Inclanalysis™ Digital Inclinometer Analysis Software with USB Key	IC35600
Pull Cable	IC7300
Pull Cable Reel	WL046617
Cable Return Pipe	EP050410
Return Pipe Coupling	EPFI429005

additional equipment

ITEM	PART #
3.34 in./85 mm Snap Seal Inclinometer Casing Dead-end Pulley	ICA0063-1
3.34 in./85 mm Glue & Snap Inclinometer Casing Dead-end Pulley	ICA0063-2
2.75 in./70 mm Snap Seal Inclinometer Casing Dead-end Pulley	ICA0064-1
2.75 in./70 mm Glue & Snap Inclinometer Casing Dead-end Pulley	ICA0064-2

ordering options

Longer probe lengths are available, please contact a member of our sales team at RST Instruments Ltd. to discuss your requirements.



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