GEOLOGICAL, GEOPHYSICAL, GEOTECHNICAL SERVICES AND INSTRUMENTS

OYO

Remote Monitoring System for Stationary Inclinometer

i-SENSOR2 LinQ-Tilt

Probe (MODEL-4499)

Logger (MODEL-4784)

< Abstract >

LinQ-Tilt is stationary type inclinometer to measure inclination in the underground and installed at multi layers in a borehole using dedicated casing pipe.

This can be applied for landslide monitoring and civil work supervision, such as shield tunnel, excavation work and etc.

Borehole inclinometers are genera.ly operated by manual work at once a week or a month, while the LinQ-Tilt can be connected to i-SENSOR2 LinQ-Tilt which is the dedicated logger for setting remote monitoring system.

The i-SENSOR2 LinQ-Tilt has a warning alert function and a self-judgment function and it is available to prepare /develop an early warning system for preventing natural disasters.

< Features>

- Multiple sensor can be easily built at a site and installation work is simple and speedy
- MEMS (Micro Electro Mechanical Systems) sensor is applied and low power consumption.
- Minimum interval of deployment is 50 cm and equivalent data of general borehole inclinometer can be obtained.
- Continuous monitoring by remote monitoring system can be easily prepared with the i-SENSOR2 LinQ-Tilt.
- Measurement and data transmission interval are automatically changeable by setting threshold on the self-judgment functions.

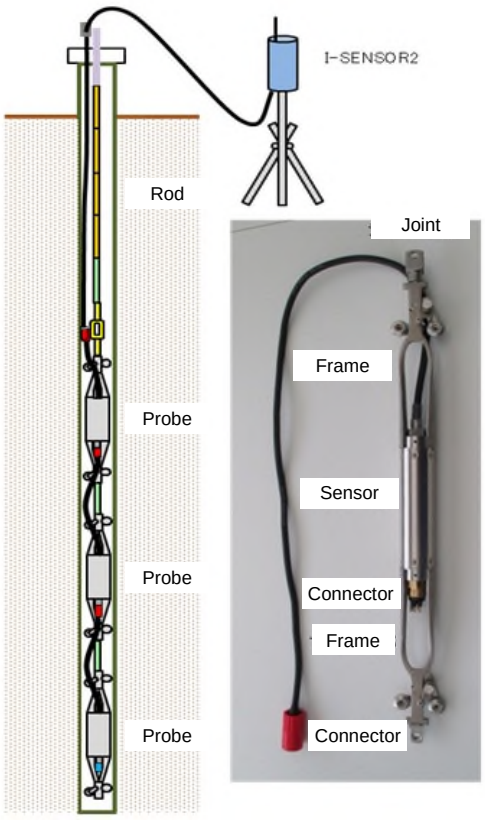
< Specification >

○ Probe

Measurement direction	: 2 axes (A axis, B axis)
Output data	: Angular representation
Measurement range	: +/- 15°
Resolution	: 0.001°
Measurement accuracy	: +/- 0.1 % F.S.
Temperature characteristic	: +/- 0.008°/°C and lower
Data transmission	: RS-485 (4-core cable)
Connectable number	: Up to 20 units
Installation interval	: min. 50 cm
Cable length	: max. 120 m
Power consumption	: 25 mA and lower (at DC 12 V) per 1 unit

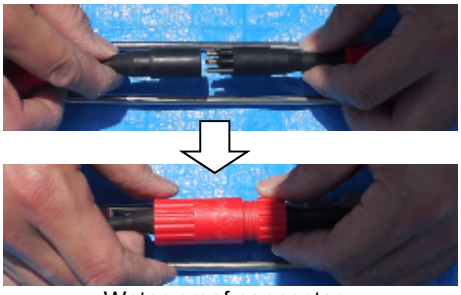
○ Logger

- Inclinometer
  - Connection sensor : LinQ-Tilt (MODEL-4499)
  - Data storage capacity : approx. 10,000 data (at 20 units)
  - : approx. 43,000 data (at 3 units)
- Interface
  - USB : USB2.0 × 1 port (For conversion port between USB and RS232C)
  - Memory card : SD-card, SDHC-card
  - Communication card : SIM-card (GSM/GPRS)
  - LED : Status LED=Activating conditions
    Access LED=Battery check and Writing task into SD
  - Outer contact input : 3 ch
  - Outer contact output : 3 ch (non-contact output)
- Communication
  - Packet communication : GSM/GPRS
  - Time & position : GPS
- Power source : DC+6 to DC+15 V
- Protection grade : Splash-proof
- Outer Dimension
  - Outer size : approx. φ85 × 220 mm (excluding projections)
- Weight : approx. 1 kg (excluding battery)

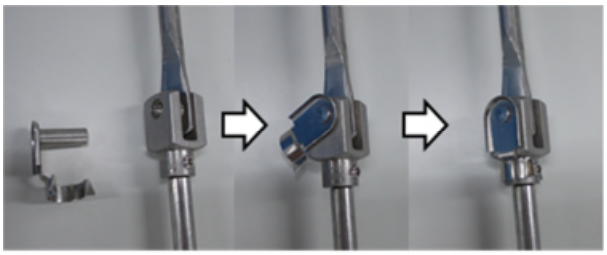


Whole-view Probe

Simply and Easily Connecting Work



Water-proof connector



Plug the pin → Lock the lever

Color, design and specifications are subject to change without notice

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