

KS GEOLINK

Optional



for further analysis purpose



13F., No. 953, Zhongzheng Rd., Zhonghe Dist., New Taipei City 23544, Taiwan

TEL: (02) 2659-8339 FAX: (02) 2659-8389





GEO

康信創意科技有限公司

# CTL Series

Creative Maintenance Technology Co., Ltd.

# Cellular Tilt Logger



#### Summary

CTL Series is a low energy, low cost and robust tiltmeter.

It measures tilt in two perpendicular axes in the plane base and is intended to be permanently installed to provide long term observation with maximum sensitivity and resolution.

The collected data can be sent to cloud via NB-IoT or LTE-M, and the power source can be either from lithium battery or solar panel. All the electronics are covered in IP67 housing for environmental protection, and it is typically bolted to the structure via the mounting plate and tamper proof screws.

#### **Features**

- · Equipped with high accuracy MEMS accelerator
- · 2 axes data output, and the angle accuracy is within  $\pm 0.002^{\circ}$  (15°)
- · Dual communication interface (Bluetooth & USB)
- · LED light indicator
- · IP67 dust and water resistance
- · Low energy , suitable for long term observation
- · Low cost and efficient power supply by solar Panel
- The collected data can be sent to cloud via NB-IoT or LTE-M
- · The housing is painted with weather & correctionresistant paint for environmental protection purpose
- · Impact, robust and easy install
- · Tamper proof screws kit keep your device safe

#### **Applications**

- · Wind turbine tower, power transmission and distribution tower tilt monitoring
- · Building structure, retaining and building walls tilt monitoring
- · Bridge pier , landslide monitoring
- · Building safety along adjacent excavations monitoring
- · Ground subsidence monitoring
- · Oil depot and storage tanks and chemical barrel tanks tilt monitoring
- · Tilt monitoring of water dams and concrete dams

SW

#### **Application Field**



Hillside

Building Structure

Wind Turbine Tower

Excavation

Oil Depot & Chemical Barrel

Concrete & Water Dams

Bridge Pier

# Ordering Information

CTL

Series

CTL

CTL

Tilt Logger

NB

LTE

Model NB NB-IoT

Measurement Range

LTE-M

Measurement Range 15 ±15° 90 ±90°

±15°, ±90°

90

Power Supply L Li-ion Battery Solar panel

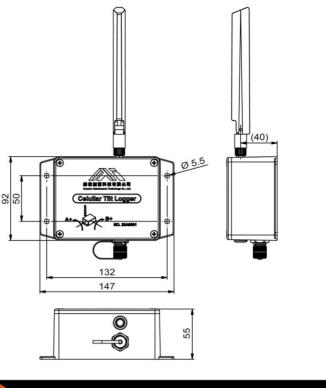
Optional Mounting plate Tamper proof screws Kit B + A None

BA

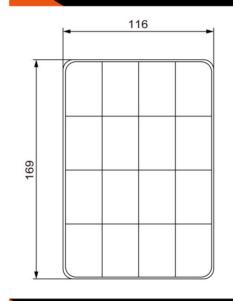
#### Specification

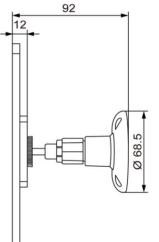
moded of formation to the first	210 , 200	
Resolution	±0.0001°	
Accuracy	±0.002°	
Temp. Influence Deviation Value	±0.002° / °C	
Sample Time	Min : 2 min , Max : 1440 min (1 Day)	
Axes	2 Axes	
Storage	512KB Flash Memory	
Measure Temp. & Accuracy	-20 ~ +80 °C , The Inbuild Thermometer Accuracy Is $\pm 0.3$ °C	
Communication Interface	NB-IoT , LTE-M	
Communication Protocol	MQTT	
User setting interface	Bluetooth , USB	
Power supply	DC 3.6V 13500 mAh D-size Replaceable Li-ion Battery	5V / 5W Monocrystalline Silicon Solar Panel
Installation method	M4 Screw Fixing	
Dimension W X D X H	147mm x 92mm x 55mm (Without Aerial)	
Appearance	Aluminium Alloy Painted In Black	
Weight	635g ±5% (Without Aerial)	
Working Temperature	-20 ~ +80 °C	
Storage Temperature	-20 ~ +85 °C	
Working Humidity	0 ~ 95%	
Water & dust Resistant	IP67	
Mounting plate	Stainless Steel , Thickness : 3mm	
Tamper proof screws kit	Stainless Steel	

# Outline Dimension



#### Solar Panel Outline Dimension





# Mounting Plate Outline Dimension

