# T7000-G: FULLY TEMP COMPENSATED ULTRA-HIGH PRECISION DIGITAL OUTPUT DUAL-AXIS TILT SENSOR SINGLE BOARD



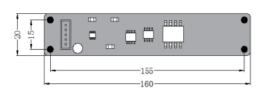
### PRODUCT DESCRIPTION

The T7000-G is a fully temperature compensated ultra-high precision dual axis tilt sensor with a resolution of 0.0005°, an accuracy of 0.001°, and a temperature drift of 0.0005°/ $^{\circ}$ C. The output interfaces RS232, RS485, RS422, Modbus, and TTL are optional. The product is a customized inclinometer for measuring the inclination angle of geotechnical and foundation pits. It integrates a 24-bit ARM high-end system internally, with a resolution of 4 seconds and a response frequency of up to 100Hz. Users only need to connect the T7000-G to the data transmission circuit to form a high-precision inclinometer.

## PRODUCT MAIN SPECIFICATION

Parameter	Conditions	T7000- G-5	T7000- G-10	T7000- G-15	T7000- G-30	Unit
Measuring range		±5	±10	±15	±30	o
Measuring axis	axis	X, Y	X, Y	X, Y	X, Y	
Zero temperature drift	-40 ~ 85°	±0.0005	±0.0005	±0.0005	±0.0005	°/℃
Sensitivity temperature coefficient	-40 ~ 85°	≤50	≤50	≤50	≤50	ppm/℃
Frequency response	DC response	100	100	100	100	Hz
Resolution		0.0005	0.0005	0.0005	0.0005	0
Accuracy	-40 ~ 85 ℃	0.001	0.002	0.003	0.005	0
Long term stability	-40 ~ 85 ℃	<0.002	<0.003	<0.004	<0.006	0
Power-on start time	0.2					S
Response time	0.01					S
Output rate	5Hz, 15Hz, 35Hz, 50Hz can be set (RS485 does not have this function)					
Output signal	RS232/RS485/RS422/TTL/ CAN/(MODBUS Optional)					
Average working hours	≥45000 hours/time					
Impact resistance	20000g, 0.5ms, 3 times/axis					
Anti-vibration	10grms、 10 ~ 1000Hz					
Insulation resistance	≥100ΜΩ					
Waterproof level	IP66 (IP67 can be customized)					
Cable	Standard 10 cm-length, wear-resistant, oil-proof, wide temperature,					
	shielded cable 4*0.2mm2					
Weight	20g (excluding packaging box)					

### PRODUCT DIMENSION





# **■ PRODUCT APPLICATION**

- Railway locomotive monitoring
- Precision laser platform equipment
  Satellite solar antenna
- Vehicle chassis monitoring
- Based on tilt angle monitoring
- Pan tilt leveling
- Satellite solar antenna positioning
- Ship navigation attitude measurement
- Medical equipment
- Angle control of various construction machinery
- Precision machine tool horizontal control