

T700-G: MEDIUM PRECISION DIGITAL OUTPUT DUAL-AXIS TILT SENSOR SINGLE BOARD



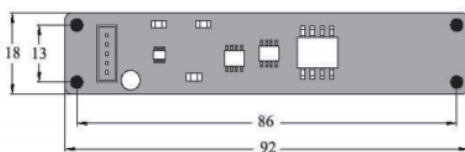
■ PRODUCT DESCRIPTION

The T700-G series is a digital output dual axis tilt sensor, equipped with a high-precision 16bit A/D converter and outputs the dual axis tilt value through an n-order filtering algorithm. The output interfaces RS232, RS485, RS422, TTL, Modbus, and CAN bus are optional. The product can correct sensor temperature drift based on the monitoring temperature changes of the built-in temperature sensor, ensuring the repeatability of the product in low and high temperature environments. Output the corresponding frequency of 100Hz.

■ PRODUCT MAIN SPECIFICATION

Parameter	Conditions	T700-G-10	T700-G-30	T700-G-60	T700-G-90	Unit
Measuring range		±10	±30	±60	±90	°
Measuring axis		X, Y	X, Y	X, Y	X, Y	
Zero temperature drift	-40 ~ 85°	±0.001	±0.001	±0.001	±0.001	°/°C
Sensitivity temperature coefficient	-40 ~ 85°	≤100	≤100	≤100	≤100	ppm/°C
Frequency response	DC response	100	100	100	100	Hz
Resolution	Bandwidth 5Hz	0.005	0.005	0.005	0.005	°
Accuracy	-40 ~ 85°C	0.01	0.02	0.03	0.05	°
Long term stability	-40 ~ 85°C	<0.013	<0.022	<0.031	<0.054	°
Power-on start time		0.2				s
Response time		0.01				s
Output rate	5Hz, 15Hz, 35Hz, 50Hz, 100Hz can be set (RS485 does not have this function)					
Output signal	RS232/RS485/RS422/TTL/PWM/ CAN/(MODBUS Optional)					
Average working hours	≥55000 hours/time					
Impact resistance	20000g, 0.5ms, 3 times/axis					
Anti-vibration	10grms、 10 ~ 1000Hz					
Insulation resistance	≥100MΩ					
Waterproof level	IP66					
Cable	Standard 10 cm-length, wear-resistant, oil-proof, wide temperature, shielded cable 4*0.2mm ²					
Weight	10g (excluding packaging box)					

■ PRODUCT DIMENSION



■ PRODUCT APPLICATION

- Railway gauge ruler and gauge leveling
- Wind turbine shimmy attitude
- Bridge, dam monitoring
- Robot tilt monitoring
- Signal towers, high-voltage power poles
- Satellite solar antenna positioning
- Medical equipment
- Angle control of various construction machinery
- Precision machine tool horizontal control