

## T700-I: DIGITAL OUTPUT 3-AXIS EXCAVATION ANGLE SENSOR & SETTLEMENT INCLINOMETER

### ■ PRODUCT DESCRIPTION

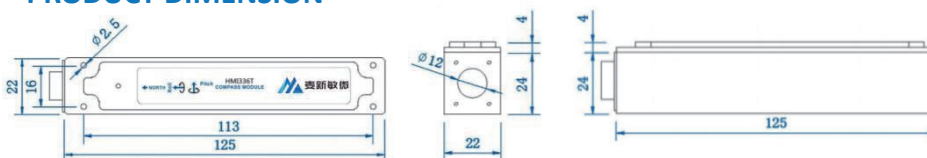


The T700-I series is a digital output tri-axis tilt sensor, equipped with a high-precision 16bit A/D converter and outputs the dual axis tilt value through an n-order filtering algorithm. The output interfaces RS232, RS485, RS422, TTL, Modbus, and CAN bus are optional. The product can correct sensor 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-I-10	T700-I-30	T700-I-60	T700-I-90	Unit
Measuring range		±10	±30	±60	±90	°
Measuring axis		X, Y, Z	X, Y, Z	X, Y, Z	X, Y, Z	
Zero temperature drift	-40 ~ 85°	±0.008	±0.008	±0.008	±0.008	°/°C
Sensitivity temperature coefficient	-40 ~ 85°	≤100	≤100	≤100	≤100	ppm/°C
Frequency response	DC response	100	100	100	100	Hz
Resolution		0.001	0.001	0.001	0.001	°
Accuracy	-40 ~ 85°	0.01	0.02	0.03	0.05	°
Long term stability	-40 ~ 85°	<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 can be set) (RS485 does not have this function)				
Output signal		RS232/RS485/RS422/TTL/ 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		IP67				
Cable		Standard 1.5m length, wear-resistant, oil-proof, wide temperature, shielded cable 4*0.3mm <sup>2</sup>				
Weight		150g (excluding packaging box)				

### ■ PRODUCT DIMENSION



SIZE: L125\*W24\*H28MM

### ■ 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