

T700-E: MEDIUM PRECISION ANALOG VOLTAGE OUTPUT DUAL-AXIS TILT SENSOR

■ PRODUCT DESCRIPTION

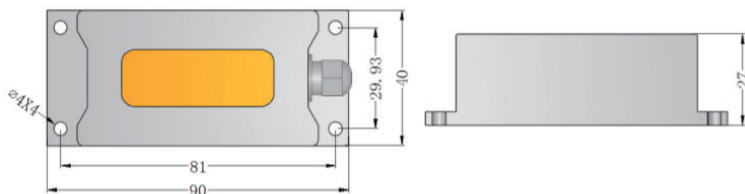


The T700-E is an analog voltage dual-axis tilt sensor. Users only need to collect the voltage value of the sensor to calculate the current tilt angle of the object. The built-in (MEMS) solid pendulum measures changes in the static gravity field, converts them into tilt angle changes, and outputs them through voltage (0~10V, 0.5-4.5V, 0~5V optional). The product adopts a non-contact measurement principle and can output the current attitude and inclination angle in real time. It is small in size and has good ability to withstand shock and vibration. It is especially suitable for application machinery and other harsh industrial environments.

■ PRODUCT MAIN SPECIFICATION

Parameter	Conditions	T700-E-10	T700-E-30	T700-E-60	T700-E-90	Unit
Measuring range		±10	±30	±60	±90	°
Measuring axis		X, Y	X, Y	X, Y	X, Y	
Zero temperature drift	-40 ~ 85°	±0.002	±0.002	±0.002	±0.002	°/°C
Sensitivity temperature coefficient	-40 ~ 85°	≤100	≤100	≤100	≤100	ppm/°C
Zero point bias	0° output	0-5V output-2.5V, 0-10V output-5V				V
Frequency response	DC response	100	100	100	100	Hz
Resolution	Bandwidth 5Hz	0.001	0.002	0.002	0.002	°
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 signal		0-5V、0.5-4.5V、0-10V				
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 1.5 meter-length, wear-resistant, oil-proof, wide temperature, shielded cable 6*0.3mm ²				
Weight		150g (excluding packaging box)				

■ PRODUCT DIMENSION



SIZE: L90*W40*H27MM

■ 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