

T7000-E: HIGH PRECISION ANALOG VOLTAGE OUTPUT SINGLE-AXIS TILT SENSOR

■ PRODUCT DESCRIPTION

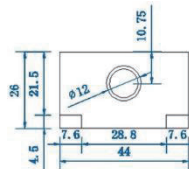
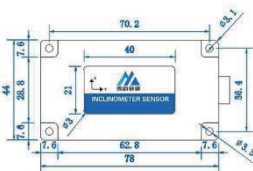


The T7000-E series is a high-performance voltage output single-axis tilt sensor with measurement range $\pm 180^\circ$ ($0^\circ \sim \pm 360^\circ$ optional) and maximum accuracy of 0.008° . It can output standard 0-5V and 0-10V analog voltages, with RS232 and RS485 options available simultaneously. Good anti-interference characteristics, suitable for long-distance signal transmission. The product is easy to install and use, with multiple output options, resistant to external electromagnetic interference, and strong ability to withstand vibration and impact, suitable for measuring angles in industrial control environments such as surveying and mapping.

■ PRODUCT MAIN SPECIFICATION

Parameter	Conditions	T7000-E	Unit
Measuring range		± 180	$^\circ$
Measuring axis	axis	X/ Y	
Zero temperature drift	$-40 \sim 85^\circ$	± 0.001	$^\circ/^\circ\text{C}$
Sensitivity temperature coefficient	$-40 \sim 85^\circ$	≤ 100	ppm/ $^\circ\text{C}$
Zero point bias	0° output	0-5V output-2.5V, 0-10V output-5V	V
Frequency response	DC response	100	Hz
Resolution	Bandwidth 5Hz	0.001	$^\circ$
Accuracy	$-40 \sim 85^\circ\text{C}$	0.008	$^\circ$
Long term stability	$-40 \sim 85^\circ\text{C}$	< 0.01	$^\circ$
Power-on start time		0.2	s
Response time		0.01	s
Output signal		0-5V、0-10V	
Average working hours		≥ 55000 hours/time	
Impact resistance		10000g, 0.5ms, 3 times/axis	
Anti-vibration		10grms、10 ~ 1000Hz	
Insulation resistance		$\geq 100\text{M}\Omega$	
Waterproof level		IP67	
Cable		Standard 1.5 meter-length, wear-resistant, oil-proof, wide temperature, shielded cable $6 \times 0.3\text{mm}^2$	
Weight		150g (excluding packaging box)	

■ PRODUCT DIMENSION



SIZE: L78*W44*H28MM

■ PRODUCT APPLICATION

- Railway gauge ruler and gauge leveling
- Bridge, dam monitoring
- Gimbal leveling
- Wind turbine shimmy attitude
- Robot tilt monitoring
- Satellite solar antenna positioning
- Ship navigation attitude measurement
- Medical equipment
- Angle control of various construction machinery
- Precision machine tool horizontal control