

Inclination transmitter

Model ES-T504



Introduction

ES-T504 high-precision inclinometer is a standard industrial inclinometer that can be used outdoors for a long time by detecting the inclination angle in the use environment to determine the inclination state of the device. The inclinometer is based on a "high-performance MEMS chip" and has an internal "high-precision acceleration sensor". It uses the proportional relationship of gravity acceleration in different directions to calculate the real-time inclination angle of the object being measured.

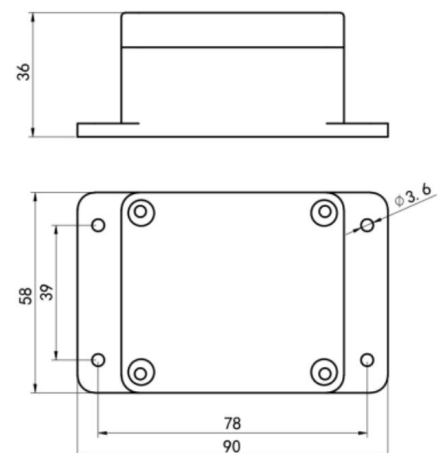
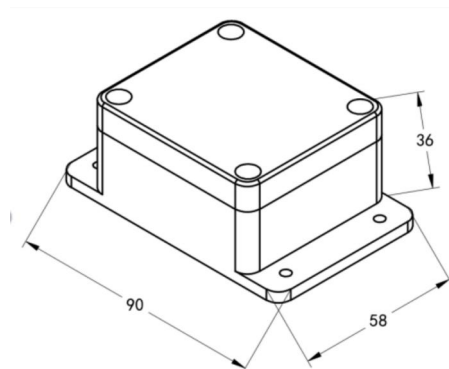
The output signal type is divided into RS485, the maximum communication distance is 2000 meters, the standard ModBus protocol, and supports secondary development.

Application

It is widely used in industrial inclination measurement and dangerous building monitoring, ancient building protection monitoring, bridge tower inclination measurement, tunnel monitoring, dam monitoring, weighing system inclination compensation, drilling inclination control and other industries

Dimension

Unit:mm



Application

- The Kalman filter algorithm is used to make the angle value collected by the device accurate and stable.
- It has a wide angle measurement range and good output signal linearity.
- It uses a dedicated 485 circuit and standard ModBus-RTU communication protocol.
- A wide voltage range of 5~30V DC.

Compliance

The electromagnetic compatibility in accordance with the following applicable directives:

EMC 2014/30/EU
Electromagnetic Compatibility
EMC 2014/35/EU
Electromagnetic Compatibility

Specification

DC power supply (default)	DC 5-30V
Maximum power consumption	≤0.15W
Working temperature and humidity	-40°C~60°C, 0~95%RH (non-condensing)
Range	X-axis -180°~180° Y-axis -90°~90° Z-axis -180°~180°
Resolution	0.01°
Typical accuracy	X, Y axis: static accuracy ±0.1°, dynamic accuracy ±0.5° Z axis: static accuracy ±0.5°, dynamic accuracy has integral error
Temperature drift	±(0.5°~1°), (-40°C ~ +60°C)
Response time	<1S
Protection level	IP65
Default cable length	60cm, cable length can be customized as required
Dimensions	90*58*36mm
Output signal	0-5V/0-10V/4-20mA, RS485 (Modbus protocol), Lora, NB-IOT

Order guide

ES-T504	high-precision inclinometer		
	CODE	Range	
	R1	X-axis -180°~180° Y-axis -90°~90° Z-axis -180°~180°	
	R2	X-axis: -30°~+30° Y-axis: -30°~+30°	
		CODE	Signal output
		1	RS485
		2	Analog 0-5V/0-10V/4-20mA, (choose one)
		3	Lora
		4	NB-IOT
ES-T504	R1	1	Order example