

## T7-C: DIGITAL OUTPUT DUAL-AXIS INCLINATION SENSOR SINGLE BOARD

### ■ PRODUCT DESCRIPTION

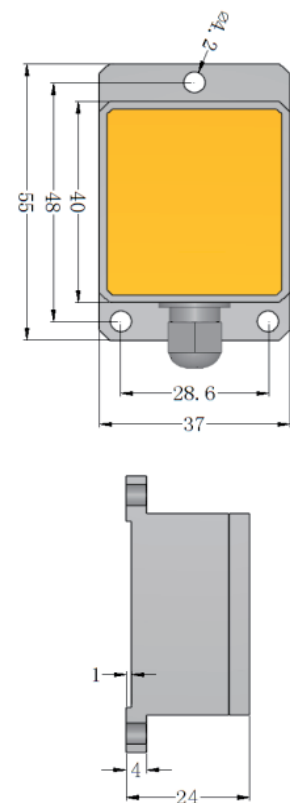


The T7-C series is a new generation of digital small-volume MEMS inclination sensors launched by MXMW Hi-Tech Company. It has a built-in dual-channel earth gravity inclination unit that measures dynamic gravity acceleration and converts it into inclination angle changes. This allows measurement of the roll and pitch angles of the sensor output relative to the horizontal plane. It has output mode as RS232, RS485, RS422, Modbus, TTL level interface standard optional. Due to the built-in MCU control system, the linearity of the sensor output is corrected twice, which makes up for the decrease in accuracy caused by insufficient correction of the analog type.

### ■ PRODUCT MAIN SPECIFICATION

Parameter	Conditions	T7-C-10	T7-C-30	T7-C-60	T7-C-90	Unit
Measuring range		±10	±30	±60	±90	°
Measuring axis		X, Y	X, Y	X, Y	X, Y	
Zero temperature drift	-40 ~ 85°	±0.05	±0.05	±0.05	±0.05	°/°C
Sensitivity temperature coefficient	-40 ~ 85°	≤200	≤200	≤200	≤200	ppm/°C
Frequency response	DC response	100	100	100	100	Hz
Resolution	Bandwidth 5Hz	0.05	0.05	0.05	0.05	°
Accuracy	-40 ~ 85°C	0.3				°
Long term stability	-40 ~ 85°C	<0.32				°
Power-on start time		0.2				s
Response time		0.01				s
Automatic output rate		5Hz output/15Hz, 35Hz, 50Hz can be set (RS485 does not have this function)				
Output signal		RS232/RS485/RS422/TTL/PWM/CAN/MODBUS can be ordered				
Average working hours		≥55000 hours/time				
Impact resistance		2500g, 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 4*0.2mm <sup>2</sup>				
Weight		55g (excluding packaging box)				

### ■ PRODUCT DIMENSION



SIZE: L55\*W37\*H24MM

### ■ PRODUCT APPLICATION

- High-voltage power line tower monitoring
- Aerial work vehicles
- Pan/tilt leveling
- Charging piles and towers
- Forklifts, engineering dump trucks
- Mining machinery, oil drilling equipment
- Solar photovoltaic tracking antenna positioning
- Medical equipment
- Angle control of various construction machinery