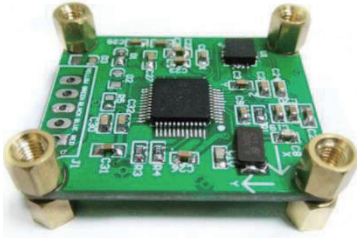


T70-G: DIGITAL OUTPUT DUAL-AXIS INCLINATION SENSOR SINGLE BOARD

■ PRODUCT DESCRIPTION

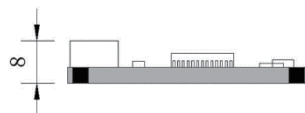
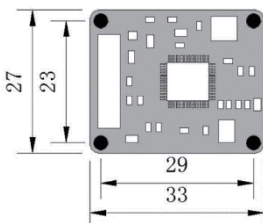
The T70-G series is a new generation of digital small volume MEMS tilt sensors launched by MXMW Hi-Tech Company. It is equipped with a dual channel Earth gravity tilt unit, which measures dynamic gravity acceleration and converts it into tilt angle changes. Thus, it is possible to measure the tilt and pitch angles of the sensor output relative to the horizontal plane. The output methods RS232, RS485, RS422, Modbus, and TTL level interface standards are optional. Due to the built-in MCU control system, the sensor output linearity is corrected twice, compensating for the accuracy decrease caused by insufficient correction in analog models.



■ PRODUCT MAIN SPECIFICATION

| Parameter | Conditions | T70-G-10 | T70-G-30 | T70-G-60 | T70-G-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 |
| Output rate | | 5Hz, 15Hz, 35Hz, 50Hz, 100HZ can be set (RS485 does not have this function) | | | | |
| Output signal | | RS232/RS485/RS422/TTL/PWM/ CAN/(MODBUS Optional) | | | | |
| Average working hours | | ≥55000 hours/time | | | | |
| Impact resistance | | 2500g, 0.5ms, 3 times/axis | | | | |
| Anti-vibration | | 10grms、 10 ~ 1000Hz | | | | |
| Insulation resistance | | ≥100MΩ | | | | |
| Waterproof level | | IP66 | | | | |
| Cable | | Standard 10 cm-length, wear-resistant, oil-proof, wide temperature, shielded cable 4*0.2mm2 | | | | |
| Weight | | 6g (excluding packaging box) | | | | |

■ PRODUCT DIMENSION



SIZE: L33*W27*H8MM

■ 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
- Charging piles and towers
- Solar photovoltaic tracking antenna positioning
- Medical equipment
- Angle control of various construction machinery