



GSM8 SERIES HIGH-PRECISION TILT SENSOR DISPLAY

Product manual

V1.1-20251127

✓ Technical Highlights

- ❖ Transmission distance: RS485/500m;
- ❖ Resolution: 0.01°/0.001°;
- ❖ 2.8-inch color display;
- ❖ DC 9-36V wide voltage input;
- ❖ Wide temperature range operation: -25°C ~ +80°C;
- ❖ Adapt and collect data from the RUICOM inclination product;



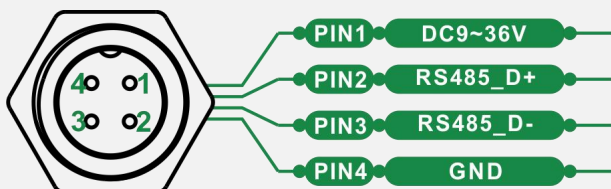
✓ Product Introduction

The GSM8 series wired transmission data handheld display, independently developed by RUICOM, is compatible with our full range of sensor products, including inclinometers, accelerometers, electronic compasses, gyroscopes, and attitude reference systems, enabling real-time data transmission and display. Equipped with an industrial wide-temperature digital screen and PC membrane buttons, this monitor boasts comprehensive functionality. It supports sensor zero calibration and can customize function buttons, panel colors, as well as third-party sensor integration and data acquisition solutions according to customer needs. The device operates with an external power supply of DC 9~36V.

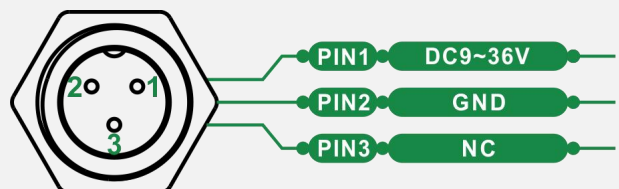
The monitor can communicate with sensors via methods such as RS485, supporting long-distance transmission. The all-metal casing structure balances portability and ease of installation, making it particularly suitable for real-time monitoring applications in harsh industrial environments.

✓ Interface Definition

Tilt sensor interface pin definition



External power supply interface pin definition



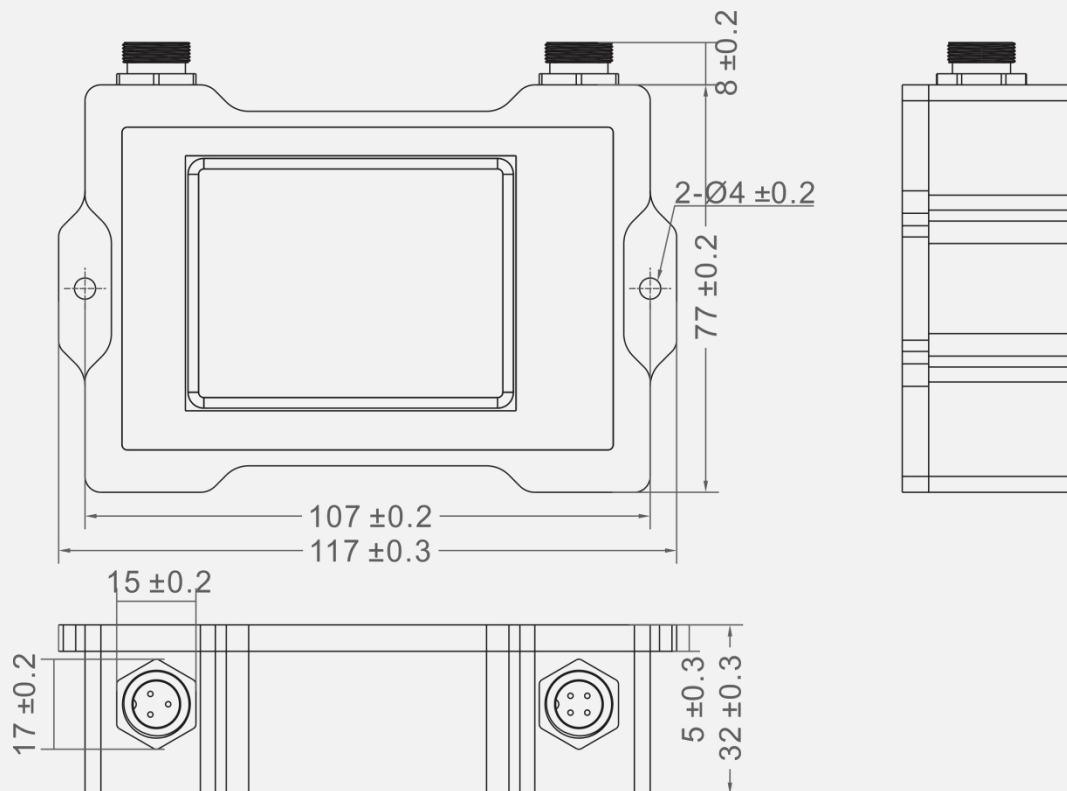
✓ Ordering

Model	Measuring axis	Match tilt sensor	Installation method
GSM8	1: Single axis	S: Standard tilt sensor	T: Screw mounting
	2: Dual axis	H: Precise tilt sensor	A: Magnetic adsorption base
	3: Three-axis	D: Dynamic tilt sensor	

Example: GSM8**1ST**: Single axis/standard /Screw mounting.

Note: If a three-axis monitor is selected, the dynamic tilt angle is a fixed combination.

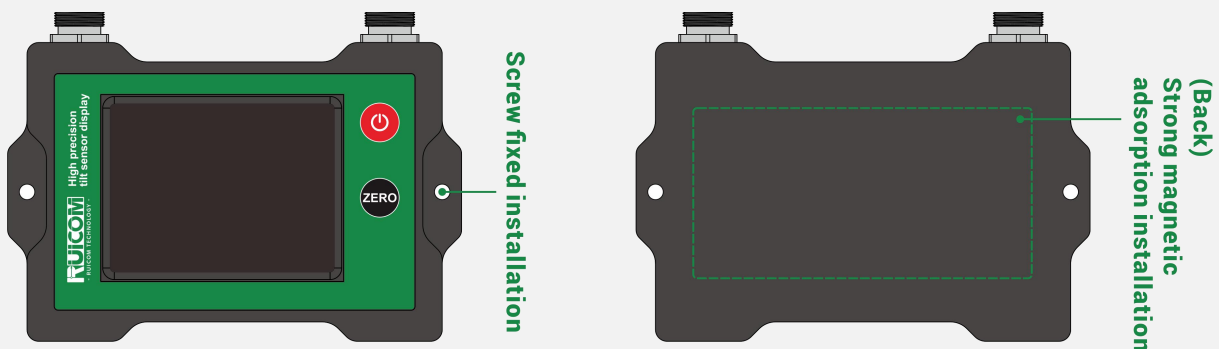
✓ Product dimensions



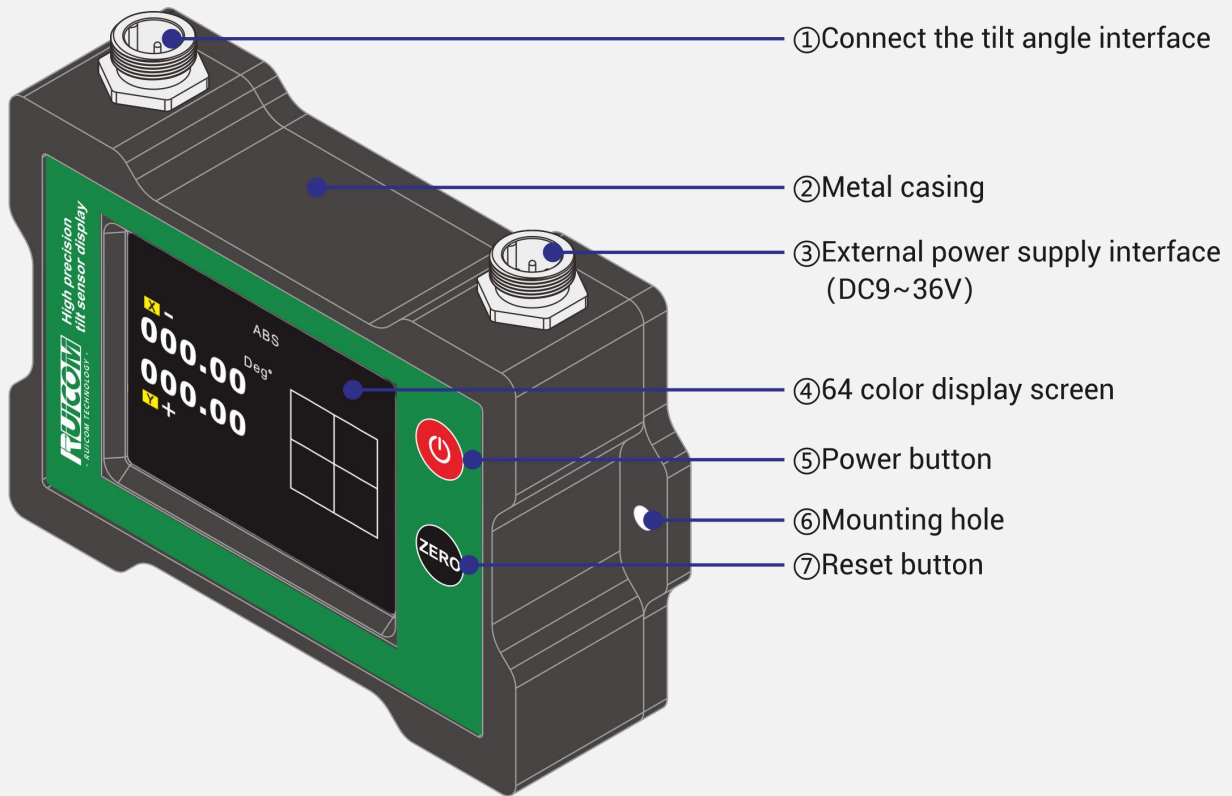
Case size: L117×W77×H32mm

Installation with screws on both sides or strong magnetic suction on the back

✓ Schematic diagram of installation method



✓ Functional Description



- (1) **Tilt sensor interface:** connect tilt sensor, select the standard tilt sensor resolution of 0.01, high-precision tilt sensor resolution of 0.001.
- (2) **Metal shell:** anodized aluminum metal shell, hard and durable.
- (3) **External power supply interface:** DC9~36V power supply.
- (4) **64-color display:** data display area.
- (5) **Power on and off button:** power on/off button.
- (6) **Mounting hole:** two M4 screws. Easy to install, convenient and fast.
- (7) **Clear button:** press the button, beep, switch the zero mode, the top of the screen shows ABS as absolute zero state, REL is relative zero state.

✓ Notes

1. It is powered by external power supply as DC 9~36V power supply;
2. The zero button must be pressed for 3 seconds to be effective.