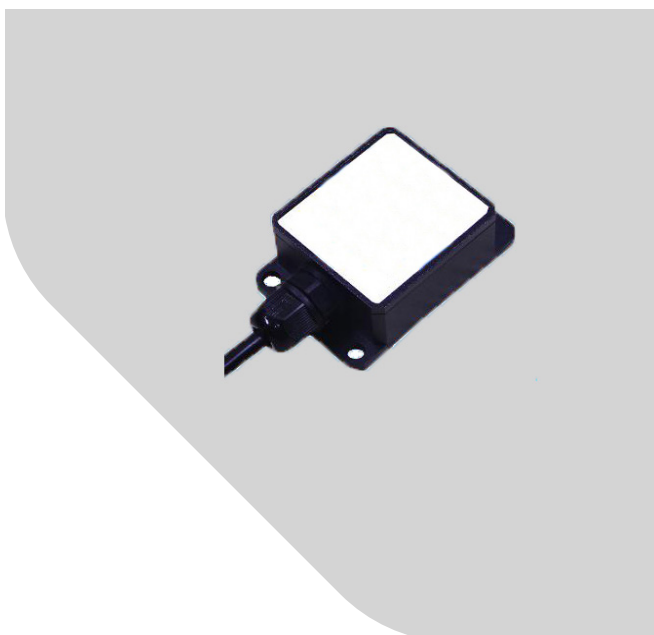![VERGE SOLUTIONS]

VVB-001
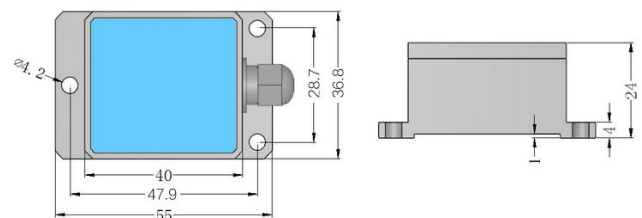# Vibration Sensor

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Data Sheet

- Module integrates high-precision gyroscopes, accelerometer, high-performance microprocessors and advanced dynamics solves dynamic Kalman filter algorithm to quickly solve the current real-time movement of the module attitude.
- The use of advanced digital filtering technology, can effectively reduce the measurement noise and improve measurement accuracy.
- Integrates gesture solver, with dynamic Kalman filter algorithm, can get the accurate attitude in dynamic environment, attitude measurement precision is up to 0.05 degrees with high stability, performance is even better than some professional Inclinometers.
- Integrate voltage stabilization circuit, working voltage is 3.3v ~5v, pin level compatible 3.3V and 5V embedded system.
- Supports serial port TTL/232 digital interface, Modbus RS485

- Highest 200Hz output data rate. The output data and rate can be adjusted.
- 4 layer PCB technology, thinner, smaller and more reliable.

Specifications

Input voltage	3.3V~5V
Consumption current	<40mA
Volume	55mm X 36.8mm X 24mm
Measuring dimensions	Acceleration: X Y Z Angular velocity: X Y Z Attitude angle: X Y Z
Range	Acceleration: ± 16g Angular velocity: ±2000°/s Attitude angle: ±180°
Stability	Acceleration: 0.01g Angular speed: 0.05°/s
Measurement accuracy	X Y axis 0.05°, Z (Drift)
Data output	Time/Acceleration/Angular velocity/Angle/Pressure/Height
Data output freq.	0.1Hz to 200Hz(10Hz default).
Data interface	Modbus RS485

All dimensions in mm

Line color function	RED	YELLOW	GREEN	BLACK
	VCC 5V	TX	RX	GND

Contact

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