

Low Noise & Low Drift Magnetometer

MS-27

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- Magnetometer measure changes of magnetic fields of magnetic objects.
- 3-axis magnetometer measure values of the x, y and z axes field, and total field of magnetic objects.
- Total field can be measured with accurate orthogonality correction between 3-axis values.
- Sensorpia Co. has accurate orthogonality correction technologies.
- Magnetometers manufactured by sensorpia Co. are highly sensitive even underwater. Since the magnetic field is not affected by seawater.



Applications

- It's very useful for the detection of ferromagnetic objects with high sensitivity and long term stability.

Characteristic

- Precise measurement of magnetic field.
- Detection of objects with magnetic properties.
- Ultra low noise three axis flux-gate magnetometer.
- Very low drift magnetometer.

Specification

| MS-27 | |
|-------------------------|---------------------------------------|
| Measuring axis | 3-axis |
| Input voltage | 12 V \pm 1 V |
| Power consumption | < 1.7 W |
| Communication interface | RS-422 |
| Measuring rate | 10 \pm 1 Hz |
| Linearity | \pm 0.05 % |
| Orthogonality error | < 0.5 ° |
| Useful frequency range | DC ~ 3Hz |
| Noise level | 5 pT rms/ $\sqrt{\text{Hz}}$ at 10 Hz |

Operating environment and Mechanical

| | |
|----------------------|---|
| Operating Temp. (°C) | -30 ~ 55 |
| Dimension (mm) | 179 (Length) X 50 (Diameter) (\pm 2) |
| Total mass (g) | < 550 |
| Coating | - |
| Waterproofing | 11 \pm 1 bar |