

Ultra-Sensitive Magnetic Sensor

Noise Density
 $3\text{pT}/\sqrt{\text{Hz}}@1\text{Hz}$, $0.4\text{pT}/\sqrt{\text{Hz}}@1\text{kHz}$

Dynamic Range
 $\pm 60\mu\text{T}$

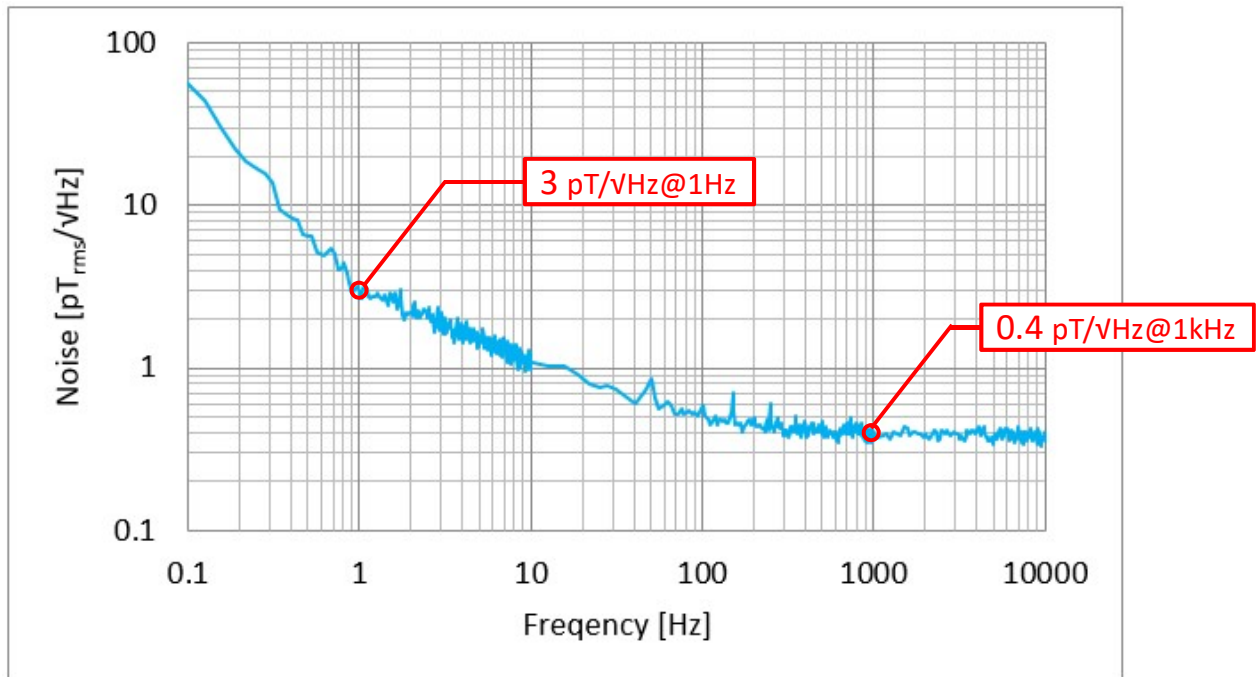
NEW

Nivio xMR Sensor



Size: 12x12x74mm(typ)
Cable Length: 1.5m(typ)

TDK puts all our efforts into developing a variety of sensors which “attracts the future (Attracting Tomorrow)” as one of our technologies. The ultra-sensitive magnetic sensors are one of them. The ultrasensitive magnetic sensor is capable of measurements at the pico tesla level, which is an extremely weak magnetic field of about 1/10,000,000 of geomagnetism. Furthermore, its innovative design allows the device to make a measurement outside the shielded room, easily without large-scale equipment, and we feel strongly sure that it can be used in a variety of applications.



【Specification】

| Item | Nivio xMR |
|--------------------|-------------|
| Sensitivity (Typ.) | 45mV/nT |
| Frequency Band | 0.1Hz~10kHz |
| Dynamic Range | ±60uT |

*Under recommended operating conditions.

Our sensors can be used for detecting bio-magnetic signals such as magnetocardiography or magnetomyography non-invasively. On the other hand, it can detect metallic particles in pharmaceuticals or food with ultra-high sensitivity, or be used for magnetic particle test (MT) which cannot be detected visually. Also, it has the possibility to explore metallic mineral resource without drilling deeply into the ground. This suggests a potentially wide range of applications for detecting weak magnetic fields. Please feel free to contact us if you would like to use a sample of our ultra-sensitive magnetic sensors.

For more information (contact), please refer to the following URL.

1. <https://product.tdk.com/info/en/techlibrary/developing/bio-sensor/index.html>
2. https://www.global.tdk.com/corp/en/tdknext/solution/biomagnetic_sensor/index.htm