BF-6 Magnetic Field Induction Sensor

BF MAGNETIC SENSORS are constructed using a high-magnetic-permeability, mu-metal core with proprietary windings. The coil windings are shielded and epoxy potted inside a high-impact ABS housing.

The BF-6 sensor utilizes a magnetic feedback design to yield a stable flat response over several decades of frequency; here, the sensors respond as a B field detector. At frequencies below the flat region, the response is proportional to frequency. The coil and preamplifier are housed in a rugged impact-resistant ABS tube and powered by an external +12 V power supply. The amplifier will drive signals up to 300 m.

APPLICATIONS
These sensors may be customized for a variety of services including geophysical surveys (magnetotelluric, audiomagnetotelluric, controlled source audio frequency magnetotelluric, magnetometric resistivity, magnetic-induced polarization, controlled source electromagnetic, tensor source high-frequency magnetotelluric, Stratagem™), marine surveys, earthquake studies, and high-accuracy magnetic field studies.

PERFORMANCE
- Frequency range: 1 Hz to 25 kHz or 1 Hz to 100 kHz
- 3-dB frequency corners: 10 Hz, 25 Hz or 10 Hz, 100 kHz
- Sensitivity (flat region): 0.3 V/nT (standard)
- Power consumption: 18 mA at ±12 V

MECHANICAL SPECIFICATIONS
- Housing: High-impact acrylonitrile butadiene styrene (ABS) straight tube
- Length: 73 cm (29 in)
- Diameter: 5 cm (2 in)
- Weight: 1.7 kg (3.7 lbm)
- Connector: 8-pin Tajimi

PINOUT SPECIFICATIONS
- 8-pin Tajimi connector pinout: 23A16-8AM
- Connector mating part: 23B16-8AF
- Dust cap: 16RC

Performance Graphs

FREQUENCY RANGE

NOISE PERFORMANCE

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