

LEMI-301

Autonomous vector magnetometer for seafloor application



LEMI-301 vector magnetometer is based on the high performance fluxgate magnetometer, all three components of which are assembled in one body. Non-magnetic housing and minimal magnetism of components enable the instrument to be implemented as a monoblock construction where the electronic unit is placed close to the sensor.

Automatic compensator provides convenient compensation of the initial magnetic field offset and reading of the full value of the measured field. Timing by internal clock provides high accuracy synchronization of data. The internal flash memory can provide long-term autonomous data storage. The

device has also two-axis tilt measurement.

LEMI-301 features

- High resolution
- Low noise
- Low temperature drifting
- Tilt angles measurement
- Full automatic compensation
- Bluetooth interface
- Timing by internal clock
- Internal flash memory
- Convenience of installation and service

Product specifications

Resolution	<i>0.01 nT</i>
Full measuring range	± 65000 nT
Band pass	DC-0.3 Hz
Noise level in the frequency (1-1 kHz), rms	< 10 pT
Sample interval of data storage	1, 5, 10, 60 s
Sensor orthogonality error	< 30 min of arc (< 2 min with corr.)
Temperature drift	< 0.2 nT/°C
Maximal operation depth	5000 m depending on housing type
Operating temperature range	-5 to +50 °C
Power consumption	0.5 W
Autonomy, max	30 days
Tiltmeter resolution	0.01 degree
Dynamic range	± 15 degree



LEMI-301

With the provided software, LEMI-301 converts the data from a randomly oriented coordinate system to a geometric coordinate system.

LEMI

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