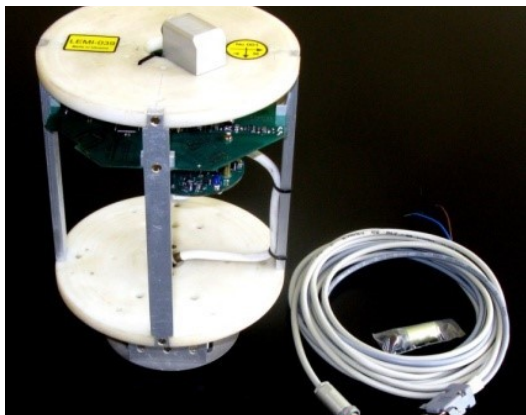


# LEMI-039D 3-COMPONENT DIGITAL MAGNETOMETER

The digital version of vector magnetometer LEMI-039D is specially adapted for the precise measurement of three components of Earth's magnetic field and its variations in the structure of sea bed station for the



needs of fundamental and applied geophysics. It has no external housing being destined for the installation inside sealed housing of sea bed station (see photo on the left). Because of this any customization of dimensions are possible at the customer's request. It has two-component tiltmeter and does not contain GPS receiver and nonvolatile memory. For data registration it has to be

coupled with a basic station by a cable through RS-232 interface. Timing by internal clock provides high accuracy synchronization of sampling each second. It is possible to set internal clock and make its correction. Other version with autonomous registration in flash memory and USB interface also available. Very low power consumption of the magnetometer is convenient for long-term autonomous measurements

## Product features

- High resolution and precision
- Low noise
- Low temperature offset
- Temperature channel
- Convenience of installation and service
- Very low power consumption

## Product Specifications

Measured range of magnetic field	$\pm 70,000$ nT
Resolution along each component	10 pT
Temperature drift	<0.5 nT/°C
Sampling rate	1 per s
Noise level at 1 Hz	<12 pT/ $\sqrt{\text{Hz}}$
Components orthogonality error	<30 min of arc
Digital output (baud rate 1115200 bit/s)	RS232
Tiltmeter resolution, degrees	0.01
Tiltmeter measurement range, degrees	$\pm 30$
Operating temperature range	0 to 50 °C
Temperature sensors resolution	0.05 °C
Power supply	5-20 V
Power consumption	<0.7 W
Weight without platform	<2 kg
Dimensions	H=285 mm, D=175 mm

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