

THREE-COMPONENT FLUX-GATE MAGNETOMETER LEMI-012



Three-component flux-gate magnetometer LEMI-012 is intended for automatic measurement of three components of DC magnetic field induction onboard the spacecraft. It allows receiving authentic information about the Earth magnetic field vector components and their variations. Its main peculiarity is low magnetism of the housing and of all components what allowed us to produce it in two versions: as a monoblock construction and with the remotely installed sensor (see figures). The galvanically insulated internal power converter utilizes onboard power supply voltage 24...34 V or another one on demand. The magnetometer can be manufactured with both analog output and with digital serial interface RS-232 output which maintains UART protocol.

TECHNICAL SPECIFICATIONS

Measurement range, nT	± 60000
Resolution, nT	< 1
Transfer error, % of reading	< 0.1
Transfer drift over temperature, % of reading / $^{\circ}\text{C}$	< 0.005
Operation temperature range, $^{\circ}\text{C}$	- 40...+80
Power consumption, W	< 0.6
Overall dimensions, mm	
monoblock	150x90x45
remote sensor	66x42x45
Weight, kg	
monoblock	0.7
remote sensor	0.14
Cable length for remote sensor (max), m	up to 5 m