FLUX-GATE MAGNETOMETER LEMI-205

Main features:

- **High stable race-track sensor**
- **Low thermal drift**
- **Thermal sensor in PCB**
- **Housing-free construction designed to be built into the user's equipment**
- **Flexible set of parameters – adjusted by a user demand**

Miniature fluxgate magnetometer LEMI-205 is intended for measurements of one component magnetic field.

MAIN TECHNICAL PARAMETERS

Measurement range (on demand)	**±6000 … ±50000 nT**
Sensitivity (depends on measurement range)	**380 … 24 μV/nT**
Bandwidth	**0 … ~3 Hz**
Gain accuracy (at t = 20°C)	**±0.2%**
Magnetic noise level at 1 Hz	**< 30 pT/Hz$^{-1/2}$**
Scale factor temperature coefficient	
vs. sensor temperature	**< 0.007 %/°C**
vs. temperature of electronics	**< 0.0015 %/°C**
Maximal zero offset (at 20 °C)	**200 nT**
Zero drift over temperature	**< 0.2 nT/°C**
Sensitivity of temperature output (sensor: LMT84 TI Inc.)	**-5.436 mV/°C**
Output voltage relative to "Ref" bus (depends on supply voltage)	**±1.25 … ±2.3 V**
Reference output "Ref" voltage relative to power supply ground	**~ half of supply voltage**
Power supply voltage (on demand)	**From 3.3 to 5.5 V**
Current consumption	**~ 30 mA**
Temperature range of operation	**0 ÷ +60 °C**
Dimensions and mass	
Sensor (w/o cable)	**∅12 x 60 mm, 10 g**
Electronic unit (PCB)	**35 x 25 x 2.8 mm, 3g**
Sensor cable length (on demand)	**0.2 … 3.5 m**

5A Naukova St., Lviv, Ukraine, 79060. Lviv Centre of ISR,
Tel/Fax: (380) 322 639163; E-mail: pron@isr.lviv.ua; http://www.isr.lviv.ua