

MAG15



Main Features

- AMR Technology
- Compact
- Analogue interface
- Low Cost, Low Power
- Low Mass, Low Volume
- Customizable
- Test connector

Lusospace' MAG15 magnetometer is an ideal solution for attitude reference in LEO missions. It provides 3 axis analogue readings of the surrounding magnetic field, and it is housed in a compact enclosure for easy integrations.

The MAG15 magnetometers are in-house designed, manufactured and calibrated, and they can be customized to meet mission requirements.

Performance Specifications	
Dynamic Field Range	+/- 64000 nT
Noise (3 Sigma)	<= 3 nT / sqrt(Hz)
Offset	<= 500 nT
Linearity	< 0.2% (full scale)
Bandwidth	<= 50 HZ
Reliability (MTBF)	< 100 FIT @ 30°C

Electrical Specifications	
Supply Voltage	+/- 15V
Power consumption	<1.0 W
Output swing (analogue)	+/- 5V (customizable)
Test connector	Full scale

Mechanical Specifications	
Mass	< 260 g
Dimensions (LxWxH)	83x90x45 mm (excl. connectors)
Mounting I/F	4 x M4

Environmental Specifications	
Operating Temperature	-40 C to +70 C (Qualification)
Non-operating Temperature	-50 C to +80 C (Qualification)
Radiation Hardness	Up to 50 kRad
EMC	CE (Conducted Emissions) CS (Conducted Susceptibility) RE (Radiated Emissions) RS (Radiated Susceptibility) ESD (Radiated & Conducted)

Qualification

Fully qualified for space applications according to ECSS (ESA) standards and MIL standards.

Heritage

Reference missions: Sentinel (all), Sentinel 3 (all), Sentinel 5p, SEOSAT, CHEOPS, BIOMASS and more.