

MAGNETORQUER

Space Products

MTQ400

Lusospace' MTQ400 is a demisable magnetorquer ideal for middle/large size spacecrafts (S/C). It generates a magnetic moment that can be used for S/C attitude control or reaction wheels offloading.

The magnetorquers are in-house designed, manufactured and tested, and they can be customized to meet mission requirements.

Specifications

Magnetic Dipole	+/- 400 A.m ²
Linearity Error	<= 1.5%
Residual Magnetic Moment	<= 0.5%
Time Constant	<= 250 ms
Supply Voltage	Up to +/- 28V
Power consumption	<= 15 W
Number of Coils	1 or 2
Mass	< 7 Kg
Dimensions (LxWxH)	950 x 80 x 80 mm
Mounting bolts	2 x M5 per support

Operating Temperature	-35 C to +65 C (Qualification)
Non-operating Temperature	-40 C to +80 C (Qualification)
Radiation Hardness	Up to 100 kRad



Main Features

- Demisable
- Low Cost
- Low Mass, Low Volume

Heritage

The MTQ400 magnetometer is the large size option of the design selected for the Space Rider (Space Reusable Integrated Demonstrator for Europe Return).

Qualification

The MTQ400 was developed for space applications up to a TRL 6 according to ECSS (ESA) and its design is free from any non-EU export restrictions.