

MTQ 140



Main Features

- Demisable
- Low Cost
- Low Mass, Low Volume

Lusospace' MTQ140 is a demisable magnetorquer ideal for small/middle 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.

Performance Specifications	
Magnetic Dipole	+/- 140 A.m ²
Linearity Error	<= 1%
Residual Magnetic Moment	<= 0.5%
Time Constant	<= 175 ms

Electrical Specifications	
Supply Voltage	Up to +/- 15V
Power consumption	< 4.5 W
Number of Coils	2

Mechanical Specifications	
Mass	< 3.8 Kg
Dimensions (LxWxH)	620 x 90 x 60 mm
Mounting I/F	2 x M6 per support

Environmental Specifications	
Operating Temperature	-40 C to +85 C (Qualification)
Non-operating Temperature	-35 C to +80 C (Qualification)
Radiation Hardness	Up to 100 kRad

Qualification

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

Heritage

Reference missions: Space Rider.