

MAGNETORQUER

Space Products

MTQ140

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.



Main Features

- Demisable
- Low Cost
- Low Mass, Low Volume

Specifications

| | |
|---------------------------|--------------------------------|
| Magnetic Dipole | +/- 140 A.m ² |
| Linearity Error | <= 1% |
| Residual Magnetic Moment | <= 0.5% |
| Time Constant | <= 175 ms |
| Supply Voltage | Up to +/- 15V |
| Power consumption | < 4.5 W |
| Number of Coils | 2 |
| Mass | < 3.8 Kg |
| Dimensions (LxWxH) | 620 x 90 x 60 mm |
| Mounting bolts | 2 x M6 per support |
| Operating Temperature | -40 C to +85 C (Qualification) |
| Non-operating Temperature | -35 C to +80 C (Qualification) |
| Radiation Hardness | Up to 100 kRad |

Heritage

Reference missions: Space Rider.

Qualification

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