

Datasheet

Rod Magnetorquer:

RMTQ-15

Last Revision: 19-May-2021



Overview

mu Space's Rod Magnetorquer RMTQ-15 offers high dipole moment magnetic torque to microsatellite attitude control. It is essential for microsatellites especially designed to operate in low-earth orbits for detumbling and reaction wheels desaturation operations.

The magnetorquer's momentum can be varied with signal input to the driver circuit. Our magnetorquers are manufactured with high standards of material and fabrication technology to provide the highest quality to you. They undergo a series of tests, e.g., functional test to measure the producible dipole moment and qualification/acceptance tests per MIL-STD-1540 and NASA standards.

Features

Functionality	
Dipole moment	30.00 A-m² (maximum) and 15.00 A-m² (nominal)
Linearity	<±5%
Residual moment	<0.02 A-m ²
Interfaces	
Supply voltage	5 VDC (maximum) and 2.2 VDC (nominal)
Data	Digital I/O
Electrical	NA
Mechanical	4 x M4 (or #8)
Physical	
Dimensions	50 x 70 x 190 mm
Mass	<1.2 kg
Power consumption	<11.0 W (maximum) and <3.05 W (nominal)
Environmental	
Vibration	(qualification) NA
Operating temperature	(Acceptance) -25°C to +70°C
Radiative emission	(qualification) NA
Radiation (TID)	(qualification) NA

Use Case

LEO Satellites Customization