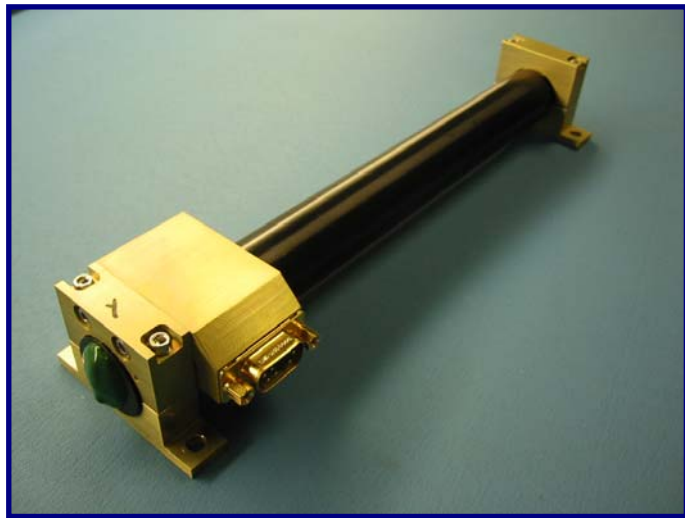


# Magnetorquer - MTR-5

## Applications

- LEO Missions
- Earth Observation Missions
- Space Science Missions
- Momentum Unloading



## Features

- Reliable Attitude Control
- Low Mass and Power
- Single or Dual Coil Operation
- Temperature Sensor
- 7 years Design Life

## Interfaces

- Analogue Inputs/Outputs
- D-Type DC Connector

## Key Specifications

- 1W at 5V peak power per coil
- Single coil magnetic moment 5 Am<sup>2</sup>
- Dual coil magnetic moment 12.4Am<sup>2</sup>

## Heritage

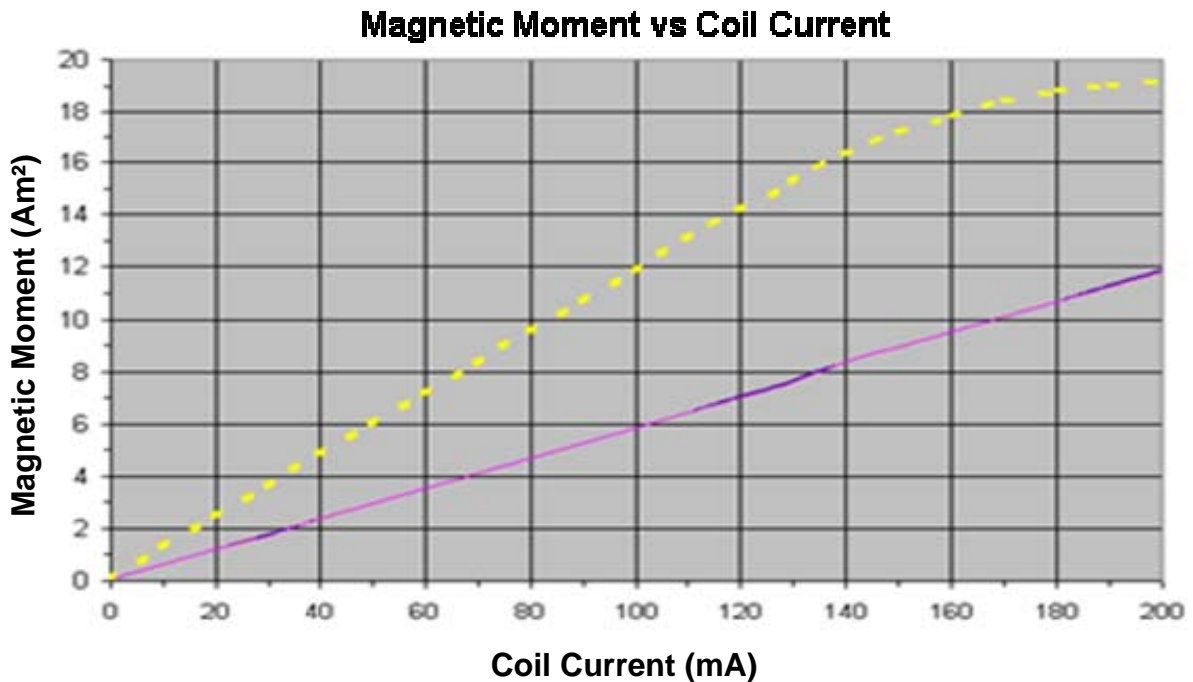
- Alsat-1
- UK-DMC
- China-DMC+4
- CFESat

## Other SSTL AOCS Products

- Reaction Wheels
- Star Trackers
- Sun Sensors
- Magnetometers
- Magnetorquer MTR-30s (single coil)
- Magnetorquer MTR-30 (dual coil)

Magnetic Moment	± 6.2 Am <sup>2</sup> per Coil
Scale Factor	0.062 Am <sup>2</sup> /mA per coil
Linearity	± 5% over the ± 100mA
Residual Moment	< 0.1 Am <sup>2</sup>
Mass	500g
Dimensions	66 x 252 x 39 mm
Power	1W at 5V per coil
Temperature	-20 to +50°C operating -40 to +80°C non-operating
Random Vibration	15Grms in all axis
Radiation Tolerance	10kRad (Si)

# Magnetorquer - MTR-5



The MTR-5 is a dual coil magnetorquer capable of providing reliable attitude control to demanding missions. It is designed to operate from a minimum of 5 volts and produces a magnetic moment of 6.2 Am<sup>2</sup>. Dual coil operation of the MTR-5 will produce a magnetic moment of 12.4Am<sup>2</sup>.

## SSTL is ISO9001:2008 certified

Subsystems are manufactured to:

- ECSS Q-ST-70-08C
- ECSS Q-ST-70-38C
- All work overseen by ESA-trained assembly staff

## Standard Delivery Service Includes:

- compliance testing
- vibration test
- thermal cycling
- user manual
- test results
- export license and shipping
- thermal vacuum testing available
- unit can be supplied prior to environmental testing

## Surrey Satellite Technology Limited

SSTL has launched over 34 satellites gaining almost 200 years in-orbit experience. SSTL draws on its world-class expertise in both small satellite platform technology and high and medium resolution optical instruments. SSTL provides complete turn-key system solutions; spacecraft, ground station, launch, operations and image processing.

SSTL is unique in the space industry; able to design, manufacture and integrate multiple satellites in-house.

*Changing the economics of space*  
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