

Magnetorquer - MTR-30

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 year design life

Interfaces

- Analogue Inputs/Outputs
- D-Type DC Connector

Key Specifications

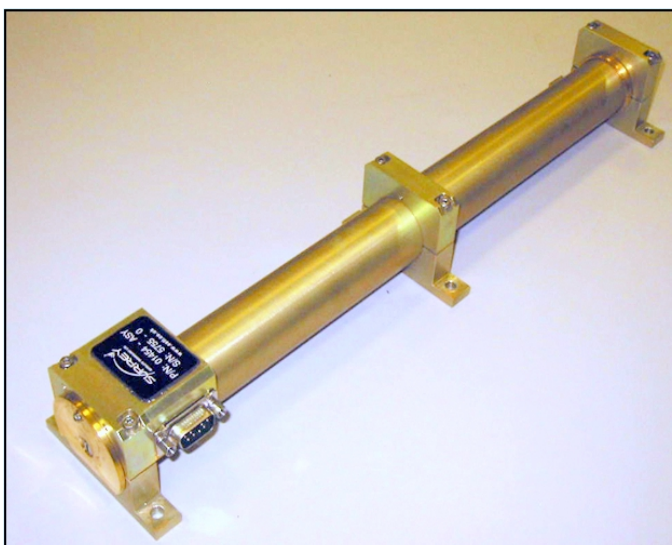
- Power 1W at 5V for 30 Am²
- Single Coil magnetic moment 30 Am²
- Dual Coil magnetic moment 45Am²

Heritage

- SciSat
- Giove-A (2005)
- Kanopus (2009)
- NigeriaSat-2 (2011)

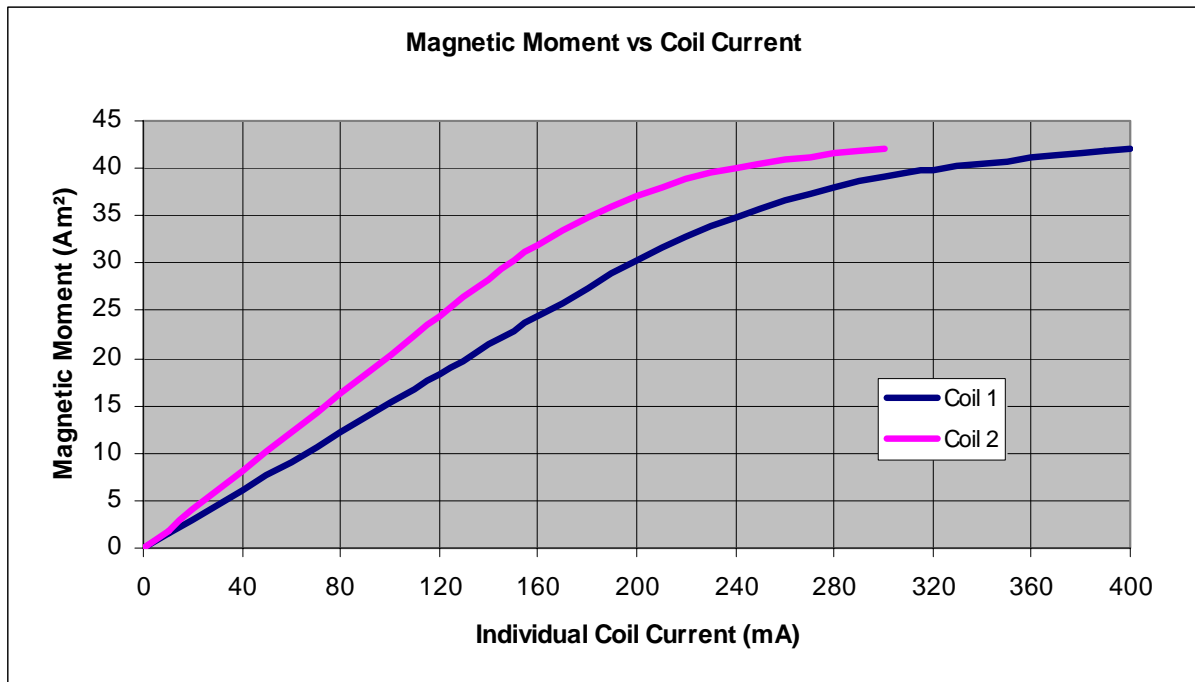
Other SSTL AOCS Products

- Reaction Wheels
- Star Trackers
- Sun Sensors
- Magnetometers
- Magnetorquer MTR-5



Magnetic Moment	± 30 Am ² for a single coil ± 45 Am ² for both coils
Scale Factor	0.15 Am ² /mA per coil
Linearity	± 5% over the ± 30 Am ²
Residual Moment	< 0.1 Am ²
Mass	1.8kg
Dimensions	378 x 74 x 49 mm
Power	1W at 5V for 30 Am ² /coil
Temperature	-20 to +50°C operating -40 to +80°C non-operating
Random Vibration	15Grms in all axis
Radiation Tolerance	10kRad (Si)

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The MTR-30 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 30 Am². Dual coil operation of the MTR-30 will produce 45 Am².

SSTL is ISO9001:2008 certified

Missions and subsystem 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
- units can be supplied prior to environmental testing

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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.

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