

# CubeTorquer & CubeCoil

Magnetorquers for CubeSats

# FEATURE LIST

# **CubeTorquer:**

- Low residual magnetic moment
- Designed for near-perfect linearity
- Includes mounting brackets for ease of integration
- Mountable on CubeControl
- PTFE harness included

### CubeCoil:

- PC104 form factor, compatible with CubeSat standard
- Low profile design to minimise height
- PTFE harness included



## **APPLICATION**

- Used to actively control the satellite's orientation
- Included by default on any CubeADCS bundle
- Suitable for most CubeSat applications

# TESTING & HERITAGE

- Successful vibration & heated vacuum tests
- Used on QB50 precursor satellites

SPECIFICATIONS			
CubeTorquer		CubeCoil	
Resistance	29 - 31 Ohm	Resistance	80 - 83 Ohm
Inductance	150 mH	Inductance	60 mH
Nominal moment (2.5 V, 25°C)	±0.24 Am <sup>2</sup>	Nominal moment (5 V, 25°C)	±0.13 Am²
Saturation moment	±1.5 Am <sup>2</sup>		
Linearity (within ±0.4 Am <sup>2</sup> )	2.5 %		
Residual moment	< 0.48 mAm <sup>2</sup>	Residual moment	0 Am <sup>2</sup>
Mass	28 g	Mass	46 g
Dimensions (rod only)	60 (L) x 10 (Ø) mm	Dimensions (no PCB or fasteners)	90 x 96 x 6 mm
Dimensions (with brackets and PCB)	18 x 14 x 62 mm		



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