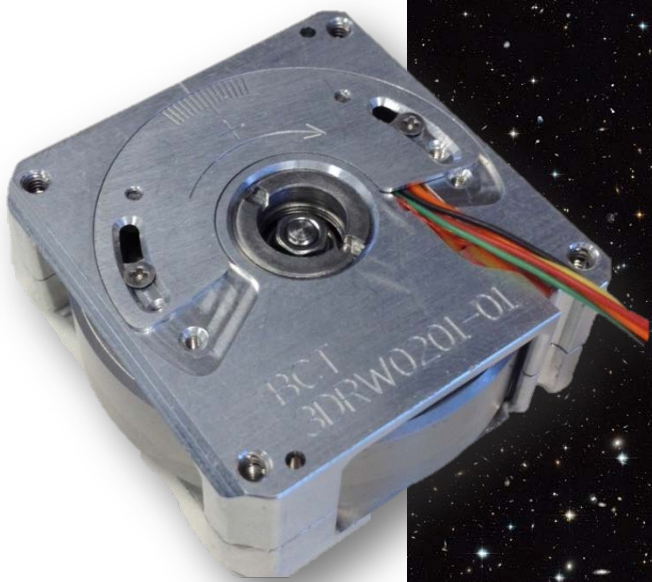




Micro Reaction Wheel

High Performance Attitude Determination for CubeSats

Reaction wheel for precise attitude control of Nanosats



Key Features

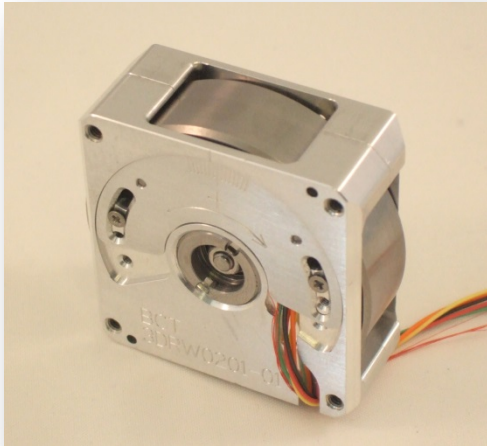
- ★ Micro-volume packaging
- ★ Highly efficient design
- ★ Low jitter
- ★ Long life bearings

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720.458.0703 www.bluecanyontech.com

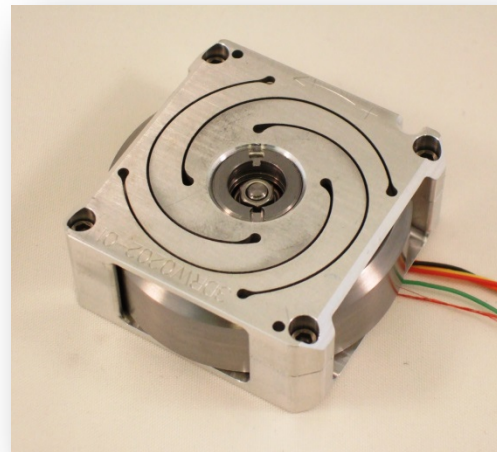
The **BCT Micro Reaction Wheel** is a highly capable CubeSat sized Reaction Wheel. The integrated BCT designed thin-motor enables a miniature size and mass, and an efficient use of power. BCT has also developed an efficient and easily integrated digital interface drive control electronics board* for the Micro-Wheel.



Micro-Wheel Capability

Specification	Performance
Momentum	18mNms
Max Speed	6,000 RPM
Torque	0.6 mNm
Lifetime	>3 Years
Mass	150 g
Volume	43 x 43 x 18 mm
Nominal power consumption	≤0.1W
Peak power	≤1.0W
Operating voltage	+5 to +15V
Data interface (optional drive electronics)	RS-422 (can support I2C and SPI)

The BCT Micro Reaction Wheel uses a highly efficient BCT built motor and a long life hybrid bearing and lubrication system. The wheels undergo extensive testing to characterize their electrical and mechanical performance, including jitter and life test.



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