

REACTION WHEEL

Empowering total attitude control

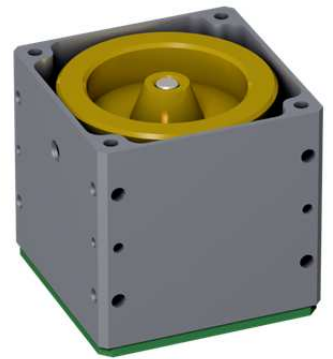
PYXIS SPACE is a young and innovative supplier for the small satellite sector, committed to the New Space philosophy of fast, cost-efficient, and reliable development. The company builds on more than 15 years of heritage in satellite technology and provides compact, high-performance solutions tailored to the needs of research institutes, universities, and commercial missions worldwide.

Our reaction wheels are the perfect complement to our ADS sensor products lineup, providing precise and reliable three-axis attitude control for your satellite missions. Featuring vacuum bearings, they ensure smooth, low-friction operation and come with proven flight heritage since 2024. Designed with COTS components, these reaction wheels combine optimal performance with cost-effectiveness, making them ideal for both small-scale missions and large-volume satellite constellations.

The reaction wheels offer a reliable solution for modern space applications, combining robustness, efficiency, and flight heritage.

FEATURES

- Optimal for 6U or 12U CubeSats
- Suitable for low-voltage satellite bus
- Easy integration into the satellite structure for all three axis, enabled by its compact cubic design
- Brushless design featuring combined triple-method commutation
- Redundant rotation control sensors for maximum reliability



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SPECIFICATIONS

Nominal Speed	5000 rpm
Maximum Speed	10000 rpm
Nominal Rated Momentum	5 mNms
Max. Torque	up to 2 mNm
Interface	CAN 2.0B
Power Supply	+4.5 V to 5.5 V
Power Consumption	up to 2.5 W
Mass	100 g
Dimensions	32 x 32 x 32 mm ³
Environment	-40 °C to +80 °C
TRL	9
Radiation	10 kRad

OPTIONS

- I2C or UART interface option
- Flat Flexible Cable (FFC)