SPACECRAFT SYSTEMS

160 Digital Reaction Wheel

The 160 digital reaction wheel incorporates advanced digital control and miniature drive circuit technology, achieving high performance with low cost, reduced mass, and compact design for microsatellite attitude control.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Model	C-SRWMI-160-4A
Rated Momentum	4 N·m·s
Flight Heritage	First flight in 2015
Application	Microsatellite
Dimensions (mm)	160 × 160 × 135
Weight (kg)	≤ 3.8
Operating Temperature (°C)	-5 to +45
Storage Temperature (°C)	-10 to +50
Communication Interface	RS-422 or CAN

Quick Overview

The reaction wheel is a critical actuator in satellite attitude control systems. The 160 digital reaction wheel incorporates advanced digital control and miniature drive circuit technology, achieving high performance with low cost, reduced mass, and compact design. It is designed to meet the stringent requirements of microsatellite platforms for high-precision attitude control.

Key Specifications

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Key Features

- Low-cost design and implementation technology.
- Integrated electromechanical design with high compactness.
- Lightweight, small size, and low power consumption.

- Excellent adaptability to space environments.

Applications

- Used for precision attitude control, stabilization, and momentum management in microsatellite platforms.

Documentation & Resources

- Technical Specifications
- Applications