

Attitude Determination and Control System (ADCS)

Designed to support on-orbit operations for a compact class of CubeSat satellites, the ADCS module incorporates a momentum wheel system; magnetic torque rods; and a miniature, intelligent star tracker.

Key Advantages

- Optimal positioning for solar power generation, communication, and instrumentation
- Improved sun sensors to calculate sun vector
- Harmonizes sensor input with onboard control mechanisms

Problems Solved

- Overcomes sensor drift, limited power consumption, and physical constraints
- Reduces launch costs, and development turnaround times
- Detectability

Market Applications

- Defense and National Security
- Commercial Satellites
- Navigation Systems
- Space Research
- Telecommunications