

SPACECRAFT SYSTEMS

Micro Integrated Electromechanical Solar Array Drive Mechanism

The solar array drive mechanism (SADM) enables satellite solar panels to rotate for sunlight acquisition, tracking, and power optimization.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Model	C-SADM-4-2A
Transmission Power	≥ 1 kW
Flight Heritage	Prototype stage
Application	Microsatellite
Dimensions (mm)	Ø100 × 160
Weight (g)	1200
Mounting Material	TC4
Operating Temperature (°C)	-25 to +65
Storage Temperature (°C)	-30 to +70

Quick Overview

The solar array drive mechanism (SADM) enables satellite solar panels to rotate for sunlight acquisition, tracking, and power optimization.

Key Specifications

Parameter	Value
Model	C-SADM-4-2A
Transmission Power	≥ 1 kW
Flight Heritage	Prototype stage
Application	Microsatellite
Dimensions (mm)	Ø100 × 160
Weight (g)	1200
Mounting Material	TC4
Operating Temperature (°C)	-25 to +65
Storage Temperature (°C)	-30 to +70

Key Features

- Integrated electromechanical structural design.
- Lightweight and compact form factor.
- High power-to-volume ratio.

Applications

- Used for solar array deployment and power transfer in microsatellite platforms requiring efficient and reliable sun-tracking mechanisms.

Documentation & Resources

- [Technical Specifications](#)
- [Applications](#)