

SPACECRAFT SYSTEMS

ADN-Based Single-Component Micro-Propulsion Module

The ADN-Based Single-Component Micro-Propulsion Module utilizes a high-energy, non-toxic ADN propellant. Through a solid gas generator, it supports pre-packaged and plug-and-play deployment, allowing quick installation and reliable operation. The system provides high total impulse and thrust output, making it suitable for micro- and nano-satellite rapid orbit adjustment, long-term attitude control, and orbit maintenance missions.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Dimensions (mm)	110 × 100 × 94
Mass (g)	1300
Total Impulse	800 N·s
Service Life (years)	≥ 4
Operating Temperature (°C)	0–50
Storage Temperature (°C)	–5–55
Communication Interface	RS-422 / CAN

Quick Overview

The ADN-Based Single-Component Micro-Propulsion Module utilizes a high-energy, non-toxic ADN propellant. Through a solid gas generator, it supports pre-packaged and plug-and-play deployment, allowing quick installation and reliable operation. The system provides high total impulse and thrust output, making it suitable for micro- and nano-satellite rapid orbit adjustment, long-term attitude control, and orbit maintenance missions.

Key Specifications

Parameter	Value
Dimensions (mm)	110 × 100 × 94
Mass (g)	1300
Total Impulse	800 N·s
Service Life (years)	≥ 4
Operating Temperature (°C)	0–50
Storage Temperature (°C)	–5–55
Communication Interface	RS-422 / CAN

Key Features

- Pre-packaged configuration.
- Plug-and-play capability.
- High total impulse and strong thrust performance.
- Modular design with excellent scalability.

Applications

- Used in **micro- and nano-satellite propulsion systems**, particularly for **rapid orbit transfer, attitude maintenance, and orbital maneuvering**, with verified flight performance since **2020**.

Documentation & Resources

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