

SPACECRAFT SYSTEMS

1 to 15 mN Electromagnetic Ratio Cold-Gas Thruster

The 1–15 mN Electromagnetic Ratio Cold-Gas Thruster adopts a non-contact, frictionless screw-type electromagnetic drive mechanism that allows precise control of thrust output through continuous adjustment of the drive signal. This continuously variable thrust system is particularly suited for fine attitude control of micro- and small-satellites, as well as for scientific or formation-flying satellites requiring ultra-high-precision control and disturbance compensation.

TECHNICAL SPECIFICATIONS

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Dimensions (mm)	Ø21 × Ø21 × 48
Mass (g)	≤ 40
Mounting Material	1Cr18Ni9Ti
Operating Temperature (°C)	–5 to +65
Storage Temperature (°C)	–5 to +70
Electrical Interface	Dual FY1–2 connectors with 3-line configuration
Thrust Range	1–15 mN

Quick Overview

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Key Specifications

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Key Features

- Long operational life and high reliability.
- Non-contact, frictionless proportional control technology.
- Lightweight, compact, and low power consumption.
- Excellent adaptability to space environments.

Applications

- Used for **micro-satellite fine attitude control** and **disturbance compensation** in ultra-stable scientific missions and formation-flying spacecraft.

Documentation & Resources

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