

SPACECRAFT SYSTEMS

Integrated Propulsion Structure Module

The Integrated Propulsion Structure Module adopts a monopropellant propulsion system utilizing a green propellant (hydroxylammonium nitrate, HAN-based). The system features a blowdown mode and a single-tank structural layout, offering a highly integrated design suitable for compact spacecraft platforms.

TECHNICAL SPECIFICATIONS

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Dimensions (mm)	350 × 386 × 490
Dry Mass (kg)	7.1
Propellant	HAN-Based Green Propellant
Operating Temperature (°C)	5–60
Storage Temperature (°C)	5–60

Quick Overview

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Key Specifications

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Key Features

- Utilizes a monopropellant propulsion system with non-toxic propellant (HAN-based).
- Employs a blowdown mode and single-tank configuration for simplified design.
- Lightweight and compact structure with high system integration.
- The tank serves as the satellite’s load-bearing structure, enabling optimized external equipment arrangement and reduced overall structural mass.

Applications

- Successfully applied in the **Longjiang Satellite**, demonstrating proven flight performance.

Documentation & Resources

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