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MPS-120XL™ CubeSat High-Impulse Adaptable

Overview

MPS-120XL™ CubeSat **H**igh-Impulse **A**daptable **M**odular **P**ropulsion **S**ystem (CHAMPS) is a 2U x 1U hydrazine propulsion system that provides both primary propulsion and 3-axis control capabilities in a single package. The system is designed for CubeSat customers needing significant ΔV capabilities including constellation deployment, orbit maintenance, attitude control, momentum management, and de-orbit.

Specifications and Performance

Dimensions: 10 cm x 10 cm x 22.7 cm

Mass: <2.4 kg Dry, <3.2 kg Wet

Operational Temperature Range: +5°C to +50°C

Command Method: Digital or Discreet Analog 5 V

Power Consumption: <4 W Startup, <1 W Operation

Operational Voltage: 5 V Nominal

BOL Thrust: 2.79 N (high thrust) to 0.26 N (low thrust) per thruster

Minimum Impulse Bit (at blowdown-averaged feed pressure): 0.00484 to 0.000467 N-sec per thruster



22 CFR 125.4(b)(13) applicable

Development Status

In Development

Publications

Coming Soon

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