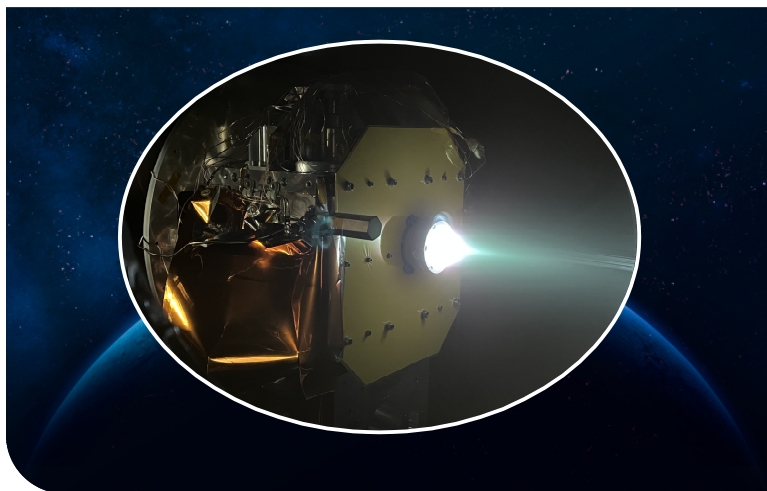


Iris 250 – Propulsion Module



Product Overview

ExoTerra's Iris 250 Propulsion Module delivers up to 250 kN-s to any spacecraft and fits inside the diameter of a standard 24 in Lightband. Iris 250 is a pre-engineered, bolt-on electric propulsion solution package for your rideshare spacecraft.

Iris 250 is based on ExoTerra's Halo, a flight-proven miniature Hall-effect thruster, operating on 100 to 450 W power from the spacecraft. The module includes all necessary power processing, propellant storage, flow control, piping, and harnesses.

Revolutionary Solar Electric Propulsion Module

ExoTerra's revolutionary Iris product line of bolt-on Solar Electric Propulsion Modules offers best-in-class propulsion performance in a pre-integrated package. Rideshare spacecraft no longer have to settle for sub-optimal orbits or short duration missions: Iris offers the ability to optimize the mission orbit by adjusting inclination or orbit altitude after a rideshare drop-off. Iris modules reduce spacecraft life cycle cost by extending mission lifetime up to 5 years, and can perform large orbit insertion burns and end of life deorbiting.

The 250 kN-s variant (Iris 250) is **flight-qualified** for LEO constellation spacecraft. It fits the inner diameter of a standard 24" Lightband, with a total height of only 35 cm. Electronics are radiation tolerant to 30 kRad TID and operate at low sub-kilowatt levels. Adding to flexibility, Iris 250 can be operated using xenon or krypton propellant.

Input Power: 100 – 450 W

Input Voltage: 22 – 36 V

Thrust Range: 4 – 30 mN

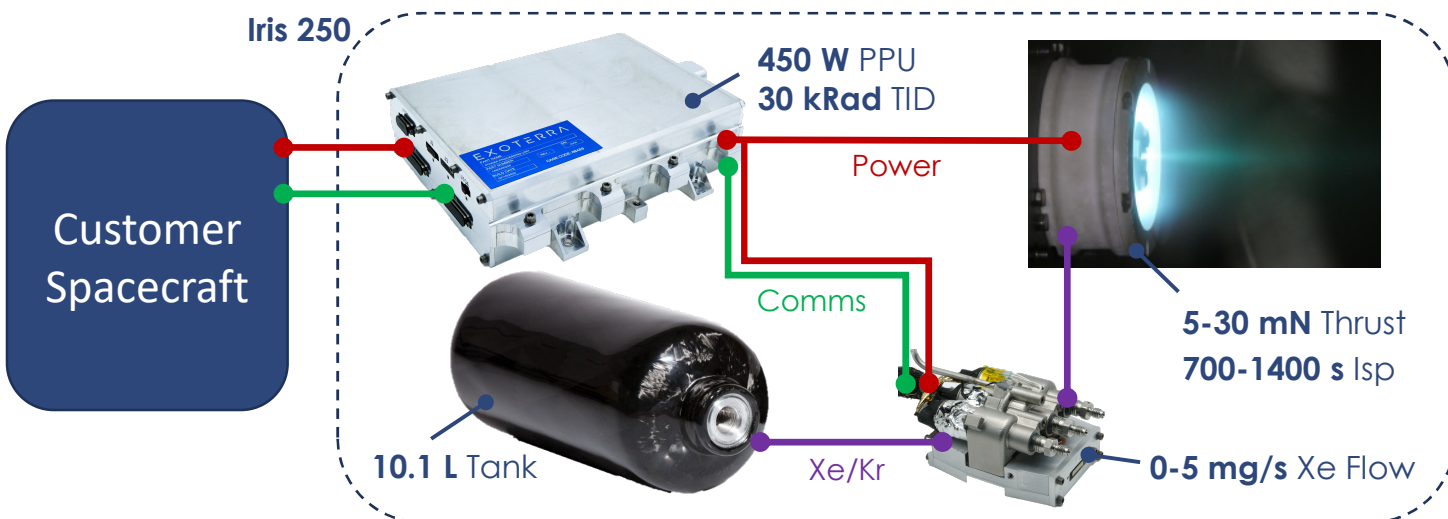
Isp Range: 600 – 1400 s

Dry Mass: 18 kg

Total Impulse: Up to 250 kN-s

Radiation Tol.: 30 kRad

Propellant: Xenon or Krypton



For more information contact:



contact@exoterra.com



720-734-2055



www.exoterra.com

About ExoTerra

ExoTerra was founded in 2011 with a vision of reducing the cost of space exploration. We pursue this goal by developing affordable technologies that reduce the cost of gravity by minimizing spacecraft mass through electric propulsion, miniaturization of components, and in-situ resource utilization.

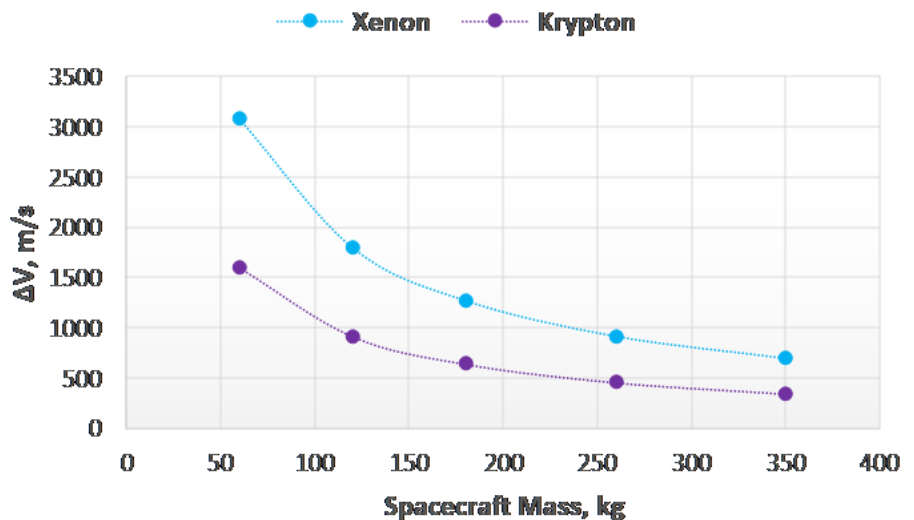
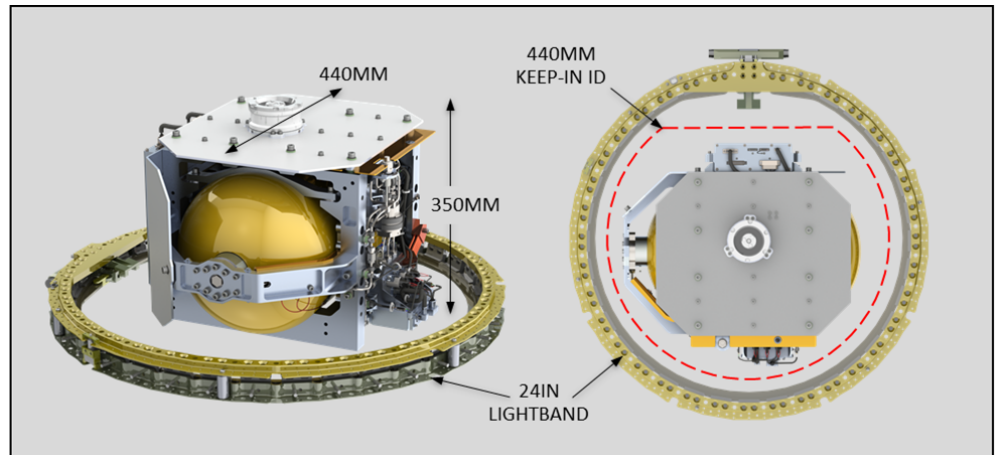
Our Team

ExoTerra's team consists of over 50 engineers and technicians. Not just Hall thruster experts, our veteran engineers and staff have designed and flown over 15 different commercial and government spacecraft, many of which utilized solar electric propulsion systems. ExoTerra has the facilities and expertise necessary to design, build, test and fly complete propulsion solutions.

Iris 250 Development Status

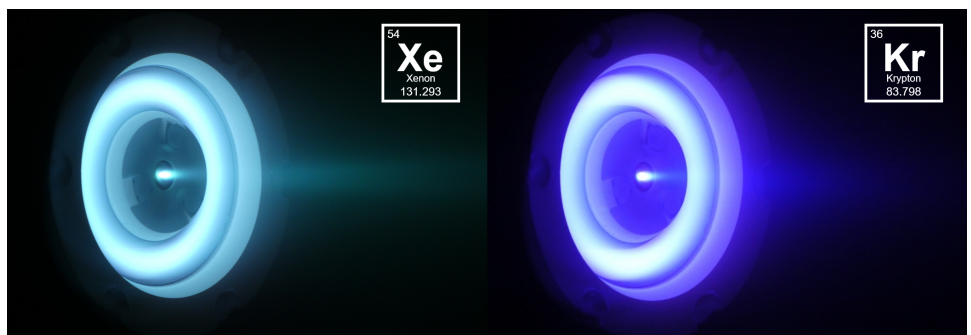
ExoTerra's propulsion modules include the complete, flight-proven Halo electric propulsion system. Iris 250 combines these components with a 10 L tank to provide up to 250 kN-s impulse. This pre-packaged propulsion system is qualified for flight as of January 2024.

Iris 250 Module and Envelope Dimensions



Iris 250 Performance Envelope

Max. Specific Impulse Operating Point



Halo and Iris 250 operate with xenon or krypton propellant

For more information contact: