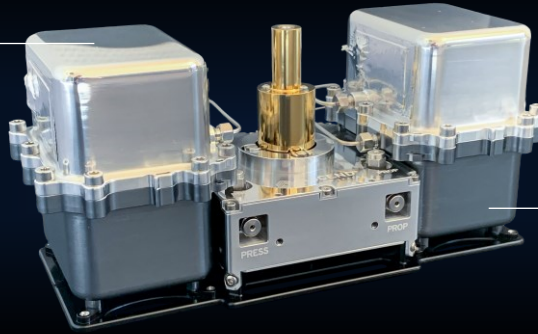


ASCEND

Propulsion System

- Customizable tank size & location
- Launch safe, delivered pre-filled
- SpaceX rideshare compliant (RPUG)
- Availability off the shelf



- Fully integrated (plug&play)
- Best-in-class thrust & specific impulse (resistojet)
- Dual leak safe design
- Design & testing based on ECSS

Performance

Total impulse	1 kNs, 2 kNs, 5 kNs, 10 kNs, 20 kNs, 30 kNs
Thrust	10 ... 40 mN (Telecommand controllable)
Specific impulse	200 s
Minimum impulse bit	< 10 mNs
Preheating time	< 5 minutes
Propellant	H ₂ O

Interface

Electrical interface	DMM (MIL-DTL-83513G)
Supply voltage	11 V – 34 VDC
Quiescent power	< 1 W
Thrust power	25 ... 100 W (telecommand controllable)
Communication interface	RS-485
Mechanical interface	10 x M3 fasteners
Size (starting)	96 mm x 96 mm x 220 mm (2U compatible)
Wet mass	Starting from 1600 g
Fluidic interface	1/16" Swagelok fitting

Environmental

Temperature range	+5°C to +60°C operational +5°C to +70°C non-operational
Radiation	TID > 30 krad
Random vibration / Shock	19.9 g _{rms} / SRS 1000 g (ECSS-E-ST-10-03C)

Customization

Electrical / mechanical interface	Custom connector / Custom mounting pattern
Communication interface	CAN
Fluidics interface	Fluidic extension lines
Tank & Head configuration	Custom placement
Thruster configuration	Up to 4 thrusters per system (160 mN)
Temperature range extension	-20°C to +70°C non-operational
Fueling	Fill at facility (delivered fueled by default)
Analysis	PSA, WCA, FIT, Structural