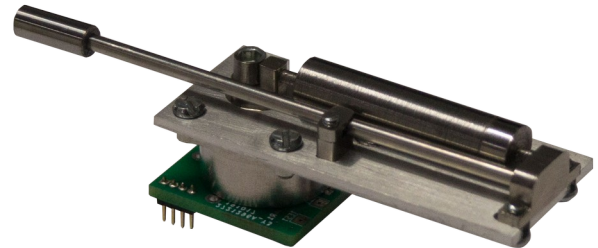


# ARO | AURORA RESISTOJET ONE

## THE SINGLE THRUSTER VARIANT OF THE ARM PRODUCT LINE

### ARM PRODUCT LINE

The ARM products provide an array of 1-12 individual thrusters with a shared tank for a variety of use cases. The products are intended for any nano- and microsatellite sizes, with specific CubeSat form factor variants being provided off-the-shelf.



The ARM product line has the following CubeSat-scale variants available

- ARM-A Attitude control
- ARM-O Orbit control
- ARM-AO Attitude and Orbit control
- ARM-DA Attitude Determination and control
- ARM-DAO Attitude Determination, control and Orbit control

Additionally, the customized modules (“ARM-C”) are available for custom use cases. Case studies have included satellites up to 200 kg in mass, as well as adapting the thrusters for existing propellant systems.

### ARO

Also known as the ARM-O1, the module was named the “Aurora Resistojet One” (ARO) as it is not only the single-thruster variant, but also the very first product of Aurora.

ARO is the world’s smallest propulsion system. It only weighs 30 g, including the thruster and valve systems, the tank and the control electronics. A simple-to-use RS485 command interface is provided. A dual redundant valve system is included for reliability.

### SAFETY

The water-based propellant ensures safety both during the launch as well as during transport to the launch site; no dangerous chemicals are involved. The tank pressure is below 100 kPa, fulfilling all common safety requirements.

## ARO SPECIFICATION

Size	Nano	Micro	Small
Idle power	50mW		
Active power	2 – 20 W *		
Thrust	0.6 – 4 mN *		
Isp	100 s **		
Impulse	1 Ns *	20 Ns **	100 Ns **
Wet mass	30 g	70 g **	300 g **
Dry mass	29 g	50 g **	200 g **
Form	20 x 20 x 20 mm	40 x 40 x 40 mm	30 x 100 x 100 mm
Availability	3-6 months from order		Starting 2021-Q2

\* Adjustable; per active thruster

\*\* Estimate