

DATASHEET | ARM-A, -AE, -DA, -DAE

Aurora Resistojet Module – Attitude control, with attitude Determination + External tank variants

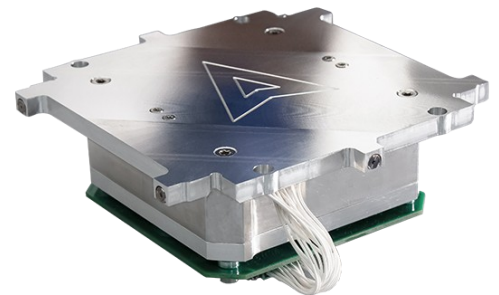
ARM PRODUCT FAMILY

The ARM products provide an array of 1-12 individual water resistojet 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 developed for off-the-shelf delivery.

ARM-A

The ARM-A is an attitude control system with 4-6 thrusters. It is available with multiple tank sizes, starting from as small a form factor as 0.35 U. The system provides full 3-axis attitude control for any sized CubeSats. The smallest unit size is suitable even for 1 U CubeSats, with other variants available for any CubeSat sizes.

The system is able to support missions of 3+ years. Final tank sizing requires analysis of the mission operations.



The AuroraSat-1 ARM-A module

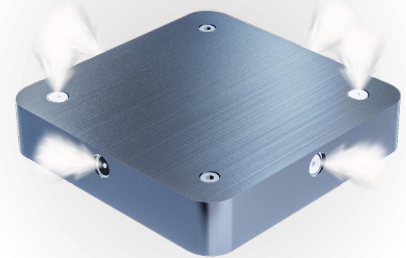
ARM-DA

The ARM-DA variant includes an integrated attitude determination board. Currently in development; contact sales@aurorapt.fi for more details.

ARM-AE, ARM-DAE

External tank variants; propellant is fed from the platform instead of an integrated tank.

Ideal for satellites that have low-thrust electric propulsion system and require higher thrust for some maneuvers, or have a chemical propulsion system and require more accuracy. Works with practically any fluid propellant. Contact sales@aurorapt.fi for details.



ARM-AE module for SmallSats

ARM-A SPECIFICATION

Values are preliminary; some design delta required for most options. Also custom tank sizes are available upon request.

Tank variant	A0, A1, A2	B1 - B4	C1 - C4
Form	0.35 U, 0.5 U, 1 U	0.5 U - 2 U	0.5 U - 2 U
Target sat	1 - 3 U	6 U	12 U
Idle Power	50 mW		
Active Power	3 - 5 W/mN		
Thrust	0.6 - 4 mN *		
Isp	100 s (estimate)		
Mass	~ 1 kg/U		
Availability	6-12 months from order		

* Adjustable; per active thruster