

DATASHEET | ARM-A

Aurora Resistojet Module – Attitude control

ARM Product lines

ARM-A

ARM-O

ARM-AO

ARM-E

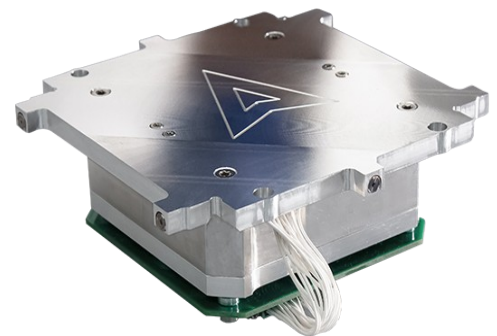
ARM PRODUCT FAMILY

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 a full 3-axis attitude control system with 6 resistojet thrusters. It is available with multiple tank sizes, starting from as small a form factor as 0.35 U. 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 integrated ADCS (Attitude Determination and Control System) ARM-DA is composed of the ARM-A as well as an additional attitude determination board. It is currently in development; please contact sales@aurorapt.fi for more details.

ARM-A SPECIFICATION

The specifications below are based on the modular design of but are preliminary; some design delta is required for most options.

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)		
Command	CAN, I2C or RS485		
Mass	~ 1 kg/U		
Availability	6-12 months from order		

* Adjustable; per active thruster