

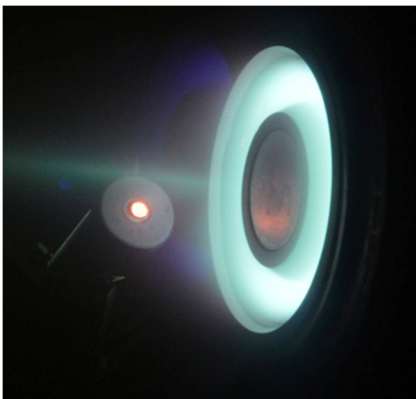


Hall-Effect Electric Thrusters

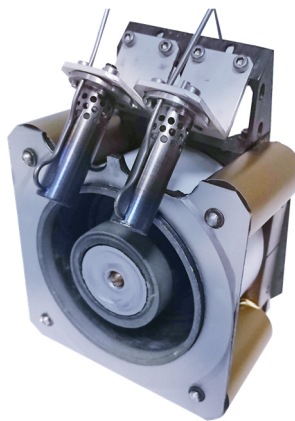
Medium and High Thrust

HET-40 / HET-85

Hall-effect thrusters of magnetic-layer type or stationary type generate thrust by creating and accelerating an ionized working gas over magnetic and electrostatic fields. The propulsion specialists of AQST USA develop and manufacture Hall-effect thrusters for thrust levels between 2 mN and 100 mN.



HET Firing in Vacuum Chamber



Hall-Effect Thruster Model HET-40



Hall-Effect Thruster Model HET-85

Based on its thrusters HET-40 and HET-85, AQST USA provides complete electric space propulsion systems including propellant feed systems, power processing units and control interface units. AQST USA has also experience in building propulsion systems using clustered configurations of thrusters.

Parameter	HET-40	HET-85
Propellant	Xenon	Xenon
Thrust	40 mN	85 mN
Specific Impulse	1,380 s	1,490 s
Power Range	< 720 W	1,300 - 1,450 W
Nominal Power	670 W	1,350 W
Life Cycle	> 3,200 h	> 7,800 h
Cathode Start Time (Classic / Heaterless)	4 min / 0.1 sec	4 min / 0.1 sec
Size (Diameter x Length) w/o Cathode	75 x 100 mm	110 x 140 mm
Mass	1,500 g	3,600 g
Development Status	TRL 9	TRL 9