



# TILE-1

## Modular small satellite propulsion

This 1U (10cm x 10cm x 12.5cm) system features high-specific impulse electric propulsion that delivers up to 3,780 N-s of impulse for small satellites. This configuration allows for up to 9 TILES to be used in parallel for higher-thrust applications.

The system, which includes the thruster head, propellant supply system, and power electronics is unpressurized for simplified integration and launch while providing 1800 seconds of specific impulse.

### Specifications

Performance item	Unit	Specification
Axial thrust		Yes
Dimensions	cm	10 x 10 x 12.5
Mass	g	1400
Total impulse	N-s	3,780
Specific impulse	s	1,800
Thrust	uN	1,500
Minimum impulse bit	uN-s	1.5
Propellant		Ionic liquid
Power consumption		
Idle	W	0.5
Nominal	W	25
Command/TLM and power interface		SPI, 12-28 V unregulated
Operating (survivable) temperature range*	C	-10 to 80 (-40 to 100)
Launch environment vibration spec*		Atlas V profile