

## The Steam TunaCan Thruster

Steam Powered Propulsion Technologies  
for Small Satellites and CubeSats

The Steam TunaCan Thruster is a safe, high-performance, electrothermal propulsion system specifically designed for CubeSats. Its unique shape factor allows its installation in the tunacan volume available in many CubeSats deployers, located outside the main CubeSat structure. Using only low-pressure water as the main propellant, the Steam TunaCan Thruster can be easily integrated into any satellite, supporting all its propulsion needs



Optimization  
& Manoeuvres



Collision  
Avoidance



Constellation  
Management



Life  
Extension



De-Orbit



Thruster Head

Heat Exchanger

Electronics

Control Systems

Water Tank

High Thrust

50x More Than Electric Propulsion

Low Power Consumption

Safe

Low Pressure Water as The Main Propellant

Easy to Integrate

No RF interference

For more Info and Pre-Orders

Contact us Today to Receive a Free  
Engineering Model of the Steam Thruster

[team@steamjet.space](mailto:team@steamjet.space)

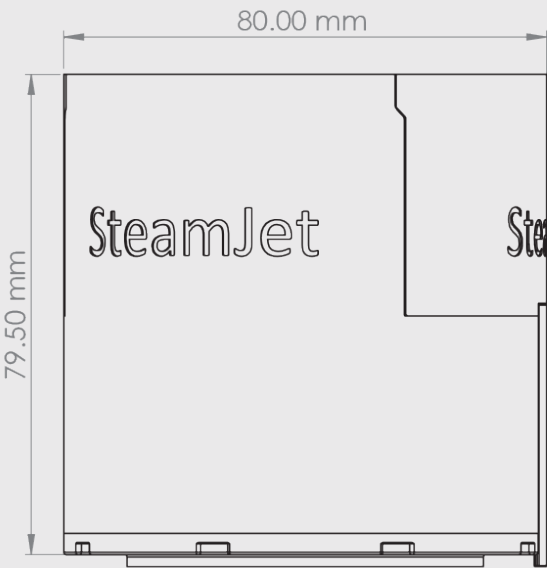
<https://steamjet.space>

17 Moorfield, Canterbury, CT2 7AN

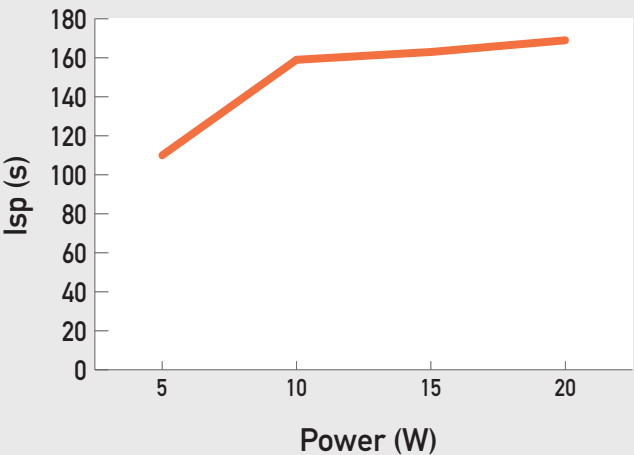
Specifications	Value
Nominal Thrust (mN)	6
Specific Impulse (s)	172
Total Impulse (Ns)	219
Minimum Impulse Bit [mNs]	10
Power consumption Thrusting / Idle [W]	<19.9 / 0.12
Wet Mass [g]	540
Propellant Mass [g]	130
Propellant	Water
Voltage [VDC]	9 - 14
Communication Protocol	RS 422, TTL UART
Dimensions [mm]	Ø 80 x 80

## Dimensions

TunaCan



## Power vs Isp



Space qualified according to  
ESA ECSS-E-ST-10-03C and  
NASA GSFC-STD-7000A



The Steam TunaCan Thruster  
can be operated with a power  
between 5W to 20W depending  
on the CubeSat availability

## Typical Applications

3U (5KG) SATELLITE @ 400KM INITIAL ORBIT

Product	Total Impulse (Ns)	Life-time (Years)	Orbital Change (Km)	Orbit Phasing	Collision avoidance
No Propulsion	0	1.6	No	No	No
TunaCan	219	4.3	± 70	0° to 360°	Yes

6U (10KG) SATELLITE @ 400KM INITIAL ORBIT

Product	Total Impulse (Ns)	Life-time (Years)	Orbital Change (Km)	Orbit Phasing	Collision avoidance
No Propulsion	0	1.6	No	No	No
TunaCan	219	3	± 35	0° to 360°	Yes