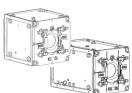


NPT30-12-1U

SMART IODINE ELECTRIC PROPULSION SYSTEM



Miniaturized electric propulsion with breakthrough performance for smallsats. ThrustMe's NPT30-I2 is a fully integrated propulsion system based on the gridded ion thruster technology. It comes in 1U and 1.5U sizes. It has a modular design, and includes the ion thruster, the PPU, the propellant storage, feed system as well as passive thermal management and intelligent operation control. The I2 version uses solid iodine propellant, is delivered pre-filled and remains non-pressurized during launch. Use of iodine also avoids sloshing and provides extreme geometrical design flexibility to accommodate platform requirements.

PRODUCT INFORMATION



EMBEDDED INTELLIGENCE

- ✓ Built-in-self-tuning algorithms
- ✓ Integrated thrust computer
- ✓ Thrust can be continuously throttled
- ✓ Supports multiple customizable operating modes
- ✓ Possible operation with thrust or power lock
- Over 50 internal parameters are continuously monitored and used for algorithm adjustments

ADVANCED SAFETY FEATURES

- ✓ Embedded fail-safe modes
- ✓ Redundancy includes cathodes and ignition systems

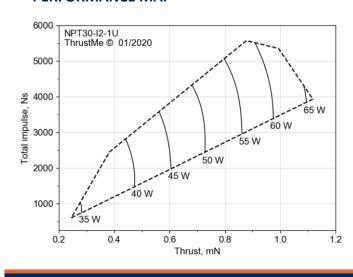
FLIGHT PROVEN

- ✓ Rad-hardened main controller option
- ✓ Patented pipeless design to avoid clogging
- ✓ Non-pressurized solid propellant
- ✓ Continuous neutralization monitoring
- ✓ Iodine-compatible sealing for safe storage

EASY TO OPERATE AND INTEGRATE

- ✓ Platform agnostic
- ✓ Full AIT support
- ✓ System shipped pre-filled
- ✓ Reduced lead times
- Engineering models available on demand
- Clusterization possible for higher thrust & total impulse

PERFORMANCE MAP



PERFORMANCE & SPECIFICATIONS

Thrust 0.3 - 1.1 mN

Total impulse up to 5500 Ns

Specific impulse up to 2400 s

Format factor 1U

Dimensions 96x96x113 mm

Total wet mass 1.2 kg
Total power 35 - 65 W

Thrust vector accuracy < 1°

INTERFACE

Input Voltage 12 - 28 V Bus interface 12C, CAN

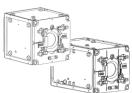
ThrustMe 4bis Rue des Petits Ruisseaux 91370 Verrières-le-Buisson France

contact@thrustme.fr www.thrustme.fr ThrustMe offers advanced mobility solutions for the growing space industry which is facing new challenges due to the rise of satellite constellations. As experts in in-space propulsion and satellite orbital manoeuvring strategies, we enable a future where space is used sustainably to create value both on Earth, and beyond. Founded in 2017, ThrustMe has a complete portfolio of game-changing turnkey propulsion products that have already been tested in space and delivered to clients worldwide. The company made history in 2019 and 2020 with the world's first in-orbit demonstration of iodine-fuelled electric propulsion systems: a technology that has the potential to revolutionize the entire industry.



NPT30-I2-1.5U

SMART IODINE ELECTRIC PROPULSION SYSTEM



Miniaturized electric propulsion with breakthrough performance for smallsats. ThrustMe's NPT30-I2 is a fully integrated propulsion system based on the gridded ion thruster technology. It comes in 1U and 1.5U sizes. It has a modular design, and includes the ion thruster, the PPU, the propellant storage, feed system as well as passive thermal management and intelligent operation control. The I2 version uses solid iodine propellant, is delivered pre-filled and remains non-pressurized during launch. Use of iodine also avoids sloshing and provides extreme geometrical design flexibility to accommodate platform requirements.

PRODUCT INFORMATION



EMBEDDED INTELLIGENCE

- ✓ Built-in-self-tuning algorithms
- ✓ Integrated thrust computer
- ✓ Thrust can be continuously throttled
- ✓ Supports multiple customizable operating modes
- ✓ Possible operation with thrust or power lock
- Over 50 internal parameters are continuously monitored and used for algorithm adjustments

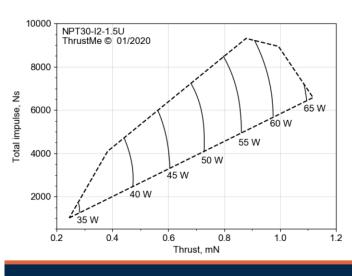
ADVANCED SAFETY FEATURES

- ✓ Embedded fail-safe modes
- ✓ Redundancy includes cathodes and ignition systems
- ✓ Rad-hardened main controller option
- ✓ Patented pipeless design to avoid clogging
- ✓ Non-pressurized solid propellant
- ✓ Continuous neutralization monitoring
- ✓ Iodine-compatible sealing for safe storage

EASY TO OPERATE AND INTEGRATE

- ✓ Platform agnostic
- ✓ Full AIT support
- ✓ System shipped pre-filled
- ✓ Reduced lead times
- ✓ Engineering models available on demand
- Clusterization possible for higher thrust & total impulse

PERFORMANCE MAP



PERFORMANCE & SPECIFICATIONS

Thrust 0.3 - 1.1 mN
Total impulse up to 9500 Ns
Specific impulse up to 2400 s

Format factor 1.5U

Dimensions 93x93x155 mm

Total wet mass 1.7 kg
Total power 35 - 65 W

Thrust vector accuracy < 1°

INTERFACE

Input Voltage 12 - 28 V Bus interface $I^2\text{C}$, CAN

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contact@thrustme.fr www.thrustme.fr ThrustMe offers advanced mobility solutions for the growing space industry which is facing new challenges due to the rise of satellite constellations. As experts in in-space propulsion and satellite orbital manoeuvring strategies, we enable a future where space is used sustainably to create value both on Earth, and beyond. Founded in 2017, ThrustMe has a complete portfolio of game-changing turnkey propulsion products that have already been tested in space and delivered to clients worldwide. The company made history in 2019 and 2020 with the world's first in-orbit demonstration of iodine-fuelled electric propulsion systems: a technology that has the potential to revolutionize the entire industry.