



Sustainable space development and utilization

HISTORY

Pale Blue was founded in April 2020 as a spin-off company from the University of Tokyo. Four co-founders received Ph.D. from the University of Tokyo and have been studying for over a decade. Pale Blue's core technologies are based on years of research at the University of Tokyo.

In 2014, we succeeded in the world's first on-orbit operation of the micro-ion propulsion systems in low earth orbit and deep space. In 2019, the micro-water propulsion system was equipped with the 3U CubeSat and successfully deployed from the International Space Station.

Pale Blue's water propulsion systems have high TRL (e.g. 7~9) and experiences in meeting the safety requirements of Japanese launch vehicles "H-IIA" "H-IIB" and ISS deployment.

BUSINESS

Pale Blue provides a variety of water propulsion systems for CubeSats or small/micro/nano-satellites as follows:

- Ion thruster
- Resistojet thruster (Electrothermal thruster)
- Unified thruster (both ion thruster and resistojet thrusters are integrated)

Besides, Pale Blue also provides a safety review package, customization, customer support, or developer kit.

PRODUCTS



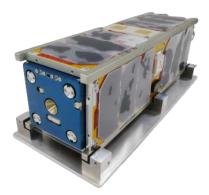
Water ion thruster 152 – 460 μN, 560 – 1452 s, 22 – 62 W, 1.6 kg (dry), 0.7U (w/o tank)



Water resistojet thruster 1 – 4 mN, 70 – 100 s, 5 – 20 W, 0.8 kg (dry), 0.5U (w/o tank)

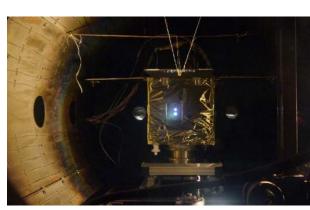


Satellite: HODOYSHI-4 (60 kg-class) Launcher: Dnepr in 2014 Propulsion type: Ion (Flight Proven)



Satellite: AQT-D (3U CubeSat) Launcher: H-IIB in 2019 (ISS-deploy) Propulsion type: water resistojet

(Flight Proven)

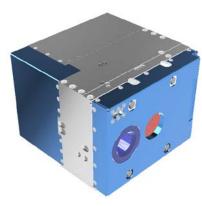


Satellite: PROCYON (60 kg-class)

Launcher: H-IIA in 2014

Propulsion type: Ion and cold gas jet

(Flight Proven)



Satellite: JAXA's tech-demo sat Launcher: Epsilon in 2022 (planned) Propulsion type: water ion and resistojet

(Flight Planned)

HQ Location	Chiba, Japan
Overseas Offices	-
Year of Establishment	April 2020
Main Products	Space propulsion system / On-orbit service
Main Clients	Satellite Manufacturers or owners
Company Website	https://pale-blue.co.jp
Contact Form	https://pale-blue.co.jp/contact
Point of Contact	contact@pale-blue.co.jp
Category	Devices and Applications,