Pale Blue

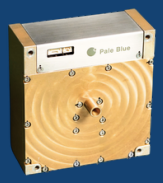


PBR-50 | PBR-10 | PBR-20 | PBR-30 | PBI | PBI cluster | PBH-100

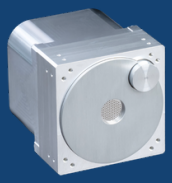
ABOUT US

Pale Blue develops and manufactures propulsion systems for small satellites, providing highly reliable solutions to satellite integrators and operators worldwide. Since its founding in 2020, Pale Blue has successfully achieved in-orbit operations for a number of propulsion systems, building a proven track record of performance in space. Pale Blue is committed to creating mobility that is core to the space industry, leading the next generation of space development, ranging from Low Earth Orbit to deep space.

FLIGHT HERITAGE



RESISTOJET
✓ Heritage



ION THRUSTER
✓ Heritage



HALL THRUSTER
✓ Flying in 2027

OUR INDUSTRIAL PRODUCTION

At Pale Blue, we don't just manufacture products. By pursuing complete traceability and QCD optimization, we offer solutions that deliver a reliable and competitive advantage.

Traceability | Quality | Cost | Delivery

RELIABLE SOLUTION FOR IN-SPACE MOBILITY

Pale Blue's propulsion systems are ITAR-free, safe and fully integrated with preloaded propellant, not requiring complex logistics and/or launch-site loading work, making it a ready-to-go solution for industrial applications.

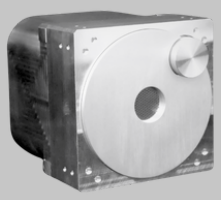
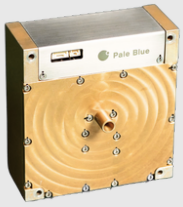
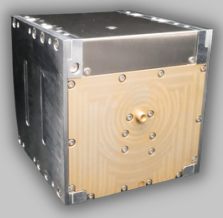
Inquiries
contact@pale-blue.co.jp

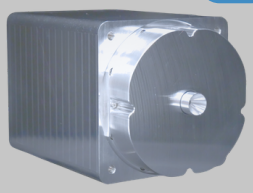
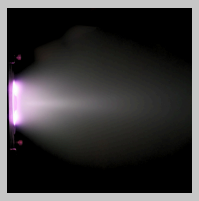
Address
MITSUI LINK-Lab KASHIWANOHA 1 Room 101,
6-6-2 Kashiwanoha, Kashiwa, Chiba, Japan

Website
https://pale-blue.co.jp/

Pale Blue's Propulsion Offering

Pale Blue offers advanced electric propulsion systems suited for a wide variety of spacecrafts ranging from nanosatellites to 700kg smallsats. All systems undergo pre-shipment acceptance tests and traceability is ensured with unique serial numbers.

	PBI	PBR-10	PBR-20	PBR-50
				
Thruster	Ion Thruster	Resistojet	Resistojet	Resistojet
Thrust	> 0.35 mN	1 mN	1 mN	10 mN
Total Impulse	> 7,000 Ns	> 55 Ns	> 220 Ns	4,400 Ns
Envelope	98 x 98 x 110 mm	90 x 95 x 50 mm	95 x 95 x 105 mm	ø250 x 300 mm
Wet Mass	< 1.6 kg	< 0.6 kg	< 1.5 kg	13.4 kg
Power Input	< 60 W	6 W	20 W	50 W

	PBR-30 WIP	PBH-100 WIP	Water Hall Thruster WIP
			
Thruster	Resistojet	Hall Thruster	Hall Thruster
Thrust	3 - 12 mN	5 - 8 mN	10 mN
Total Impulse	> 400 Ns	> 50,000 Ns	> 180,000 Ns
Envelope	110 x 110 x 185 mm	300 x 300 x 150 mm	350 x 350 x 600 mm
Wet Mass	< 2.1 kg	< 10 kg	< 45 kg
Power Input	10 - 35 W	110 - 180 W	600 W

Key Advantages

- ✓Quick start-up
- ✓No fueling work
- ✓Simple commands
- ✓Ready to use
- ✓Ease of handling
- ✓Quick delivery

Learn more

https://pale-blue.co.jp

Contact Us contact@pale-blue.co.jp

Pale Blue