TORONTECH

ELECTRIC PROPULSION PERFORMANCE TEST SYSTEM - TORONEPP™ 1000

Electric Propulsion Performance Test System - ToronEPP™ 1000

An Electric Propulsion Performance Test System provides a controlled vacuum environment for evaluating thruster behavior under space-like operating conditions. ToronEPP™ 1000 is designed for evaluation and performance testing of Hall thrusters, supporting stable vacuum levels during propellant flow.

The chamber and test platform accommodate practical mounting, instrumentation, and repeatable setup for development and verification work. This system helps teams measure performance trends and operating stability while controlling background pressure. It is a focused solution for electric propulsion labs that need dependable vacuum performance for test confidence.

ToronEPP™ 1000 is an Electric Propulsion Performance Test System built around a vacuum chamber and test platform for Hall thruster evaluation. The system supports pump-down to high vacuum and maintains controlled operating pressure while propellant gases are introduced. Its configuration helps reduce measurement uncertainty tied to background pressure and pumping capacity during thruster runs.

The platform supports engineering workflows such as performance mapping, stability checks, and comparative testing across configurations. ToronEPP 1000 is intended for R&D, verification, and test development environments working with xenon, krypton, or argon pumping capability requirements.

APPLICATIONS

Electric Propulsion Performance Test System - ToronEPP™ 1000 Applications

- Hall thruster evaluation under controlled vacuum conditions

- Performance testing and comparative benchmarking of thruster configurations
- Operating stability studies during propellant flow and extended runs
- Test development for electric propulsion programs and subsystem validation
- Lab qualification setups for repeatable electric propulsion performance measurements

TORONTECH

FEATURES

Electric Propulsion Performance Test System - ToronEPP™ 1000 Key Features

- S30408 stainless steel chamber construction supports corrosion resistance and long service life
- Vacuum chamber sized for practical Hall thruster mounting and instrumentation access
- Defined ultimate pressure performance for controlled baseline vacuum conditions
- Operating pressure capability maintained during propellant flow for repeatable testing
- Test platform supports stable installation and repeatable alignment during measurements

TECHNICAL SPECIFICATIONS

Electric Propulsion Performance Test System - ToronEPP™ 1000 Technical Specification

Specification	Details
Chamber Dimensions	φ 1000 mm × 2000 mm
Platform Dimensions	L 1000 mm × W 800 mm
Ultimate Pressure	6 h ≤ 5.0×10^{-5} Pa
Operating Pressure	≤ 5.0×10^{-3} Pa (with xenon gas flow rate of 1.5 mg/s, krypton gas flow rate of 2 mg/s, and argon pumping capability)

TORONTECH.com

TORONTECH

Torontech Inc.
251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC
601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE
Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE

Phone: +971 488 19252
Email: me@torontech.com

USA | Canada | EU | UAE | GCC | KSA | India | Africa | Latin America | Asia