

MEASURE. CHARACTERIZE. OPTIMIZE.

THRUSTERS THAT POWER THE FUTURE.

SENIS Mapper delivers high-precision magnetic field measurements and characterization of Hall effect thrusters for rockets and satellites.



COMPLETE 3D MAGNETIC FIELD MAPPING

High spatial resolution measurement



ACCURATE & REPEATABLE

Sub-mT accuracy with excellent repeatability



RAPID DATA ACQUISITION

Efficient scanning and powerful automation



BUILT FOR R&D AND PRODUCTION

From development to quality control

THE SENIS MAPPER ADVANTAGE



OPTIMIZE PERFORMANCE

Improve thrust, efficiency and specific impulse by optimizing magnetic design.



REDUCE DEVELOPMENT TIME

Validate simulations and accelerate design iterations with accurate measurements.



INCREASE RELIABILITY

Ensure stable operation, reduce anomalies and extend thruster lifetime.



ENSURE QUALITY

Consistent production quality and validation for critical missions.

ENGINEERED FOR HALL EFFECT THRUSTERS

Hall effect thrusters rely on precisely engineered magnetic fields for efficient ionization, stable discharge, and long life. Even small magnetic deviations can lead to performance loss, instability, and increased wear.



ROCKETS



SATELLITES

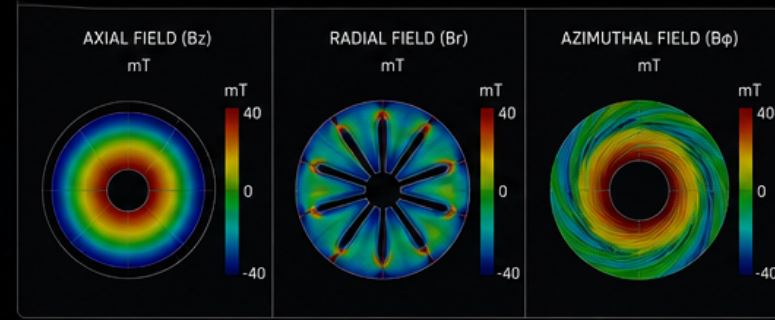


DEEP SPACE MISSIONS



ORBITAL MANEUVERING

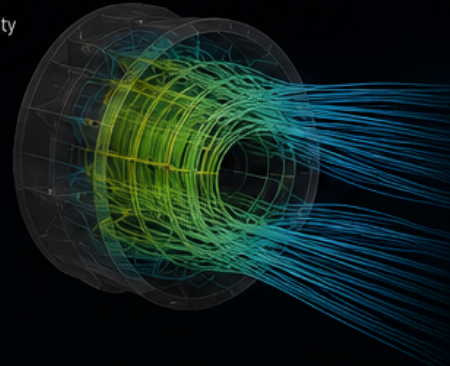
MEASURE. VISUALIZE. UNDERSTAND.



- ✓ Full 3D vector field measurement (B_x , B_y , B_z)
- ✓ High spatial resolution reveals critical magnetic features
- ✓ Identify asymmetries, field distortions and design weaknesses

COMPLETE THRUSTER CHARACTERIZATION

- Magnetic field distribution and uniformity
- Magnetic flux, topology and gradients
- Pole shape and position accuracy
- Field alignment and symmetry
- Magnetic circuit verification
- Design and simulation validation
- Performance optimization



POWERING THE NEXT GENERATION OF SPACE SYSTEMS



LAUNCH VEHICLES



COMMUNICATION SATELLITES



DEEP SPACE PROBES

SENIS
magnetic solutions

ADVANCED MAGNETIC MEASUREMENT SOLUTIONS
FOR SPACE PROPULSION INNOVATION



HIGH PRECISION
SUB-mT ACCURACY



WIDE MEASUREMENT
VOLUME



AUTOMATED &
REPEATABLE



RUGGED &
RELIABLE

MEASURE IT.
CHARACTERIZE IT.
OPTIMIZE IT.