

# Environmental Testing



## PERFORMANCE IS A PROMISE. DURABILITY IS THE PROOF.

Don't let perfect lab results fail in the real world. A flawless system can be crippled by an environment it wasn't prepared for. At the Propulsion Systems Laboratory (PSL), we provide the rigorous, data-driven environmental testing you need to move from theory to battlefield reality. We subject your entire system to the punishing extremes of ambient and desert operating conditions to uncover its true limits and guarantee its reliability.

Partner with us to validate your design, mitigate risk, and deliver a system that performs in any climate.

### Our Specialized Environmental Testing Services

We provide a comprehensive suite of testing capabilities focused on one goal: delivering the actionable data you need to build a superior, all-weather system.

#### Environmental Endurance Testing: Forging All-Climate Reliability

A system's reputation is built on its ability to perform anywhere, anytime. Our environmental chambers subject your systems to prolonged operation under simulated desert heat and varied ambient cycles. This evaluates long-term reliability under thermal stress, exposing potential failures in electronics, seals, and cooling systems before they can compromise a mission.

- Benefit: Go to battle with proven all-weather durability and mitigate the risk of mission failure due to environmental extremes.

#### Thermal Performance Mapping: Optimizing Power in Extreme Heat

Unlock your system's full potential, no matter the temperature. We conduct detailed performance mapping while simulating harsh desert conditions to see how your engine, transmission, and cooling systems hold up under extreme thermal load.

- Benefit: Maintain a critical performance edge and ensure mission effectiveness, even when operating in the most punishing hot-weather environments.

#### Development & Durability Analysis: Engineering for Robustness

The Decisive Edge is Engineered Here. In our controlled, repeatable environmental chambers, we forge battlefield dominance. By validating system performance against simulated desert and ambient conditions, we can fine-tune cooling systems, harden electronic components, and optimize ECU/TCM calibrations for thermal resilience, delivering the unwavering reliability your mission demands.

- Benefit: Eliminate environmental variables, guarantee performance from ambient to the desert, enhance thermal robustness, prevent heat-related failures, and extend the system's operational service life.