Taking innovative sensors from concept to transition and commercialization

CAMX Power, an affiliate of TIAX LLC, develops sensor technologies across the full gamut of technology readiness levels, from early-stage research to advanced demonstration and beyond.

Early detection of internal short circuits in lithium-ion batteries

Internal short circuits are the predominant cause of violent failures of lithium-ion cells in the field. An internal short typically develops slowly but remains invisible to battery management systems until it’s too late. CAMX Power has developed two novel in-pack technologies for detecting internal shorts well before thermal runaway, suitable for underwater vehicle, automotive, aircraft, and other applications. A third technology screens cells for internal shorts prior to pack assembly, achieving better sensitivity than traditional ‘aging’ methods in a fraction of the time.

Non-contact dynamic torque sensors

CAMX Power develops magnetic and optical non-contact torque sensors for rotating machinery in automotive, aerospace, and other applications. These sensors can be integrated with little or no modification to the system being measured, providing high-speed torque data for real-time control, component lifetime estimation, and event diagnostics.
About CAMX Power

CAMX Power was spun off from TIAX in 2014 to accelerate commercialization of key lithium-ion battery technologies. The two affiliated companies remain co-located, sharing the same 48,000 sq. ft. facility near Boston, MA. CAMX and TIAX technologists frequently collaborate across company lines, particularly in the case of our sensors activities. TIAX also maintains the administrative and production-facing infrastructure needed to transition technologies from the lab to the field, notably serving as prime contractor for the US Air Force’s Integrated Aircrew Ensemble program.

Working with us

CAMX Power actively participates in the SBIR program. We are noted for our high quality Phase I and II performance and for commercialization success through Phase III awards. CAMX and TIAX are well-equipped to handle government contracting requirements.

If your business seeks a growth opportunity through one of our enabling technologies, there are a variety of ways we can work together, from IP licensing to joint ventures to outright technology sales. Our development process prioritizes risk reduction and IP protection.