

9100 Market Positioning Guide

POWER. PRECISION. POSSIBILITY

OVERVIEW

The AE Techron 9100 Series power systems combine high power (up to 100 kW) with DC-250 kHz bandwidth, four-quadrant operation, and linear-like fidelity. Together, these features open doors in markets where control, dynamic range, and stability matter as much as raw power.

AUTOMOTIVE & EV SYSTEMS

Primary Buyers: EV OEMs, Tier 1 suppliers, test labs, BMS developers

Applications:

- Inverter, motor, and drivetrain testing under ripple and regenerative conditions
- DC fast charger and OBC compliance testing

Pitch Points:

- Simulates real-world EV power behavior from DC to high-frequency ripple
- Fully regenerative, returning power to the grid during sink operation
- Enables complete EV powertrain loop testing without live batteries

Positioning Angle:

"A safer, more flexible alternative to live battery packs for powertrain R&D."

AEROSPACE & DEFENSE

Primary Buyers: Avionics developers, satellite power teams, defense R&D labs, sonar manufacturers

Applications:

- Aircraft DC bus and 400 Hz AC emulation
- Power conditioning for radar, RF, or directed-energy systems
- Satellite subsystem or propulsion bus simulation
- Power for sonar and hydrography systems

Pitch Points:

- Delivers clean DC or complex waveforms to replicate airborne or space power systems
- Stable under reactive, pulsed, or capacitive loads
- Qualified for mission-critical hardware validation

Positioning Angle:

“A precision source for mission-critical power systems testing.”

INDUSTRIAL & RESEARCH

Primary Buyers: Magnetics manufacturers, R&D institutions, advanced materials labs

Applications:

- Electromagnet and coil testing (MRI, particle beam, plasma systems)
- Magnetic component characterization with AC + DC bias
- Advanced power electronics research (SiC/GaN, converters, topologies)

Pitch Points:

- High-speed control for pulse, DC, and AC magnet excitation
- Wideband output for switching and transient studies
- Scalable power for custom setups and collaborative projects

Positioning Angle:

“High-fidelity power for innovation at scale.”