Advancing the E-Mobility Ecosystem

Succeeding in the fast-paced, high-voltage, high-power transition to electric vehicles (EV) requires readily available, safe and accurate test equipment. Keysight has you covered with solutions for every aspect of the e-mobility ecosystem.

Testing in the high-power e-mobility environment

Ensuring safe & efficient EV power systems
EV onboard chargers, batteries, powertrain inverters, and related components need safe and accurate emulation of their environment. Keysight offers test solutions that emulate the AC grid, DC (high-power charging and batteries), and EV and EV supply equipment (EVSE) charging interfaces, completely surrounding the devices under test.

Achieving zero emissions with renewable energy
Capturing and storing solar energy enables EVs to be truly zero-emission. Maximum power point tracking (MPPT) algorithms enable photovoltaic (PV) inverters to optimize conversion of DC power from solar arrays to AC power. Keysight’s PV solutions allow you to test your MPPT algorithm to the EN50530 standard and beyond, including inverters with up to 12 MPPTs / inputs.

Characterizing wide-bandgap power devices
Wide-bandgap power devices offer higher efficiency and higher power in compact, lighter packages, making them ideal for power converters in the e-mobility ecosystem. Proper characterization is key to an optimized design. Keysight’s solutions allow you to perform static and dynamic characterization quickly and easily, as well as create accurate simulation models to accelerate time to market.

www.keysight.com/find/e-mobility