

Hybrid and electric powertrain systems



Complete electric vehicle development projects

Applus IDIADA is full service engineering and testing partner for electric and hybrid vehicle development projects. Some examples of vehicle projects include:

- Light electric truck conversion
- E-born3 clean sheet vehicle development
- Electric AWD vehicle with 4 EMs for torque vectoring
- Electric scooter development
- Lightweight vehicle development

Also we provide partial development projects such as:

- Concept studies
- Component specification & supplier management
- Electric scooter development
- Lightweight vehicle development
- Development of drive control and energy management software
- E-motor / HEV powertrain testing & calibration
- First run and validation of the vehicle
- Charger and charger interface integration

Charger testing

CHAdeMO charger & mode 4 compliance testing

Testing with a battery simulator enables:

- Abnormal failure testing
- Different voltage and power levels
- Simulated battery can be set "empty" immediately, repeated testing possible DC

Onboard charger testing

Communication tests, thermal stability, performance, efficiency, electric safety using battery simulator.

EVSE (charging station) mode 3 compliance testing

With 9kW three-phase A/C load checks of pilot states, PWM signals, normal start/stop, abnormal failure and malfunction