



48V LAB

Description

The CSA 48 volt laboratory has the capability to perform various types of testing on electrical components at 65V, 600A DC through to 1800A DC, and can sink up to 80V, 1000A DC for discharging batteries or loading mild hybrid electrical systems. The lab's engineers are experienced with the usage of ultracapacitors and energy storage systems for mild hybrids. Fully bespoke design and manufacture of a test rig can be made to meet a clients' requirements and components of all sizes can be tested, such as batteries, battery management units, integrated starter generators and traction motors.

Typical Applications

- Lifecycle / durability testing
- Vibration / shock testing
- Performance testing
- Environmental testing
- Ingress protection testing

Typical Components

- Integrated Starter Generators
- Traction motors
- Ultracapacitors / distributed energy / batteries
- DC - DC converters
- Inverters
- Battery management units (BMUs)
- 48V Coolant, fuel or oil pumps
- 48V Compressors
- Electrified superchargers or turbochargers
- Torque assist reversing alternators (TARA)

Capabilities

- Hi speed control and data capture (NI labview)
- Controller Area Network (CAN) / Universal Measurement & Control Protocol (XCP) digital communications control
- Thermal imaging
- Environmental enclosure of tested systems (up to 120°C)
- Surge testing, High Potential (High Pot) testing, Insulation resistance testing