



EV Supply Equipment

Charge Ports

Battery - Cell, Module, Pack

Wireless Charging Systems (WPT)

DC-DC Converter

On-board Charger

Braking System

MCU / ECU

Motor Inverter

Motor



WHAT SETS US APART

Not only do we manufacture best in class test equipment with incredibly high energy efficiency, but we also provide turnkey automated test systems with powerful automation software. No others do this.

Benefits of our automated test systems include flexibility, high throughput, and test data recording as well as providing statistical analytical reports for design review and product improvement.

EV TEST SOLUTIONS

Bidirectional and Regenerative Instruments and Automated Test Systems

As the automotive industry advances EV technologies, Chroma has innovated new solutions for testing AC/DC chargers, batteries, power train components, and in-vehicle electronics for both power and electrical safety.

Chroma's bidirectional and regenerative solutions cover a wide range of power and voltage levels which address the specialized requirements of power electronics in electric vehicles. Solutions include battery test systems, AC grid simulators, DC power supplies, AC/DC electronic loads, motor stator testers, and electrical safety analyzers for all phases of product development.

Chroma's flexible solutions provide accurate, reliable, and repeatable testing that reduces cost, increases efficiency, and will help get your products to market faster.

POWER CONVERSION

ELECTRICAL SAFETY

<p>BIDIRECTIONAL AND REGENERATIVE SOLUTIONS</p>	<p>BATTERY CYCLERS AND BATTERY SIMULATORS</p>	<p>AC/DC LOADS, SOURCES AND METERS</p>	<p>PASSIVE AND WOUND COMPONENT TESTERS</p>	<p>BATTERY INSULATION TESTERS</p>	<p>ELECTRICAL SAFETY TESTERS AND ANALYZERS</p>
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EV TEST SOLUTIONS



EV SUPPLY EQUIPMENT

BATTERY CELL, MODULE, PACK

POWER TRAIN

ON-BOARD ELECTRONICS



Regenerative Grid Simulators + AC Load
9kVA - 630kVA

Chargers, wireless chargers, V2G, ESS, Grid-tied devices

4 quadrant, regenerative, AC power source that emulates grid characteristics for testing to standards such as IEEE 1547 / IEC 61000-3-15 / IEC 62116. Power can both sink to and source from the UUT seamlessly to test EV related grid-connected devices as well as PV inverters, on-line UPS's, and smart grid test applications. AC Load options available.



Bidirectional DC Power + Regenerative Load
6kW - 180kW
100V - 1800V

Battery simulation

Charge/discharge testing and life cycle testing

Battery Simulation Motor, Motor driver

On-board charger, DC-DC converter, charge port, inverters, MCU, ECU

Two-quadrant operation enabling both DC power output and regenerative DC loading. The absorbed energy feeds back to the grid with a conversion efficiency up to 93% and can operate in constant voltage, constant current, and constant power modes. Pre-compliant with LV123 and LV148 standards on EV component testing.



Regenerative Battery Cyclers
Up to 600kW

Battery simulation

Regenerative charge/discharge, SOC, SOH, DOD, BMS

Battery simulation, Motor Driver

Battery simulation, Power control system

Discover charge rates, discharge rates, states of charge (SOC), states of health (SOH), and depths of discharge (DoD) with accurate measurements in voltage, current, temperature and power – statically and dynamically. Systems are configurable and flexible with multiple channel capabilities that can be upgraded as testing requirements change.



Electrical and Battery Safety Testers
ACWV/DCWV/IR/GB/LC/IWT/PD/CORONA

AC/DC Hipot, Impulse winding, DCR, IR tests. UL, IEC, TUV, CSA standards

Battery insulation, partial discharge detection. UL, IEC, TUV, CSA standards

AC/DC Hipot, Impulse winding, DCR, IR tests. UL, IEC, TUV, CSA standards

AC/DC Hipot, Impulse winding, DCR, IR tests. UL, IEC, TUV, CSA standards

Conduct electrical safety tests on components and products to make certain they are in compliance with IEC, UL, TUV, CSA, EN, and other electrical safety requirements. In addition to general product and component testing, our 11210 Battery Cell Insulation tester helps to detect insulation failures in the cells ensuring human safety and product reliability.

Please ask us how we can help **AUTOMATE** your testing.

