

Measurement Solutions, **Global Leader.** 



# **E-MOBILITY**

ATEQ offers many leak, flow and battery testing instruments for quality testing components on electric vehicles. Whether you produce electric cars, buses, bikes or planes, we can test your components at every step of production to make sure your customers are getting safe reliable products.

"To be a passionate global leader of innovative measurement solutions by providing premium testing equipment and unsurpassed services to our valued customers and partners."









ATEQ can provide leak and flow testing solutions for your battery applications at every step of production.

Pouches/Cells

✓ Plugs/Sockets

Housing

**Packs** 

Cooling Circuits

Modules

End of Line

#### LEAK TESTING BATTERIES

There are many different battery-related applications in electric vehicles, each with different leak testing specifications. Some battery components, like plugs, can be pressurized and use a differential pressure decay air leak test.

Other components, like battery cooling circuits, could use a flow test to ensure the circuit's integrity. Large flexible parts, like abattery housing, is a perfect application for ATEQ's differential noise canceling DNC leak test technology. When testing a battery pouch that is filled with fluid, ATEQ's Ioniq or B28 electric leak tester can check if the pouch is properly insulated by ionizing the air around it. If it is required to know the location leak, like within a circuit or on a battery cover, a tracer gas sniffer leak test can be used.

#### **OUR RECOMMENDED PRODUCTS**







### **BATTERY CHARGING/ANALYZING BALANCING**

ATEQ can provide instruments to help charge, discharge and analyze complex batteries.

Battery Modules

**Battery Packs** 

**Aviation Batteries** 

#### MODULE BALANCING

When an EV battery is diagnosed as being defective on the production line, the faulty module needs to be replaced. The EVB5100 Module Balancer charges or discharges the new replacement module to the same state of charge as the other modules.

The BCA (Battery Charger Analyzer) 12V/50A charge and quick diagnostic tool for lead, LI-ION, LI-PO, NI-CA, NI-MH batteries. The BCA (Battery Charger Analyzer) charges and discharges complex batteries and provides detailed analytics monitoring each battery cell.

#### **OUR RECOMMENDED PRODUCTS**









### **FUEL CELL LEAK TEST**

ATEQ can provide leak and flow testing solutions for your fuel cell components.

- Bipolar Plate
- ✓ Fuel Cell Stack
- ✓ Membrane Electrode
- Assembly

#### FUEL CELLS

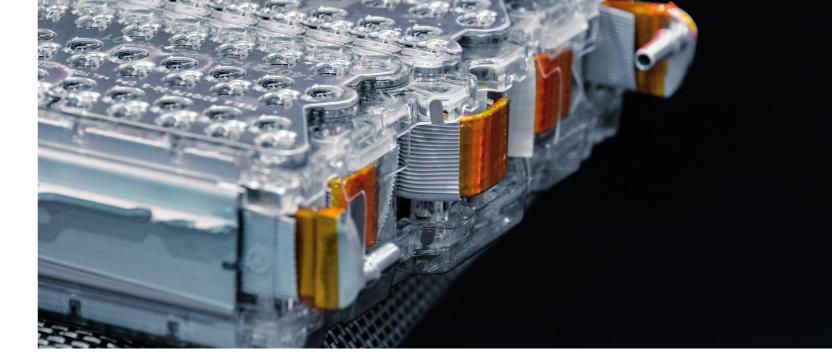
On fuel cells, the fuel side components are typically tested for leaks with forming gas since it is not flammable, and it helps detect defect areas that hydrogen could flow through. The air side of the fuel cell is typically tested for leaks with an air pressure decay or mass flow instrument.

The fuel cell's semi-permeable membrane should be tested for air flow and the vehicle's cooling system is leak tested with an air tester.

#### **OUR RECOMMENDED PRODUCTS**







## **ELECTRIC MOTOR LEAK TEST**



 $\label{eq:attention} \mbox{ATEQ can provide leak and flow testing solutions for your electric motor components.}$ 

- Motor coil insulation
- Starter
- Oil, water and circuits
- Inverter
- End of line testing

#### ELECTRIC MOTOR

Electric motors are in leak tight housings that protect the motor against splashing water. A motor housing made of plastic can be tested using ionized air when it is not mounted. If the housing is metal, or fully assembled, it can be tested with an air leak test.

The motor coil wires are coated with an insulating "varnish". At times, this "varnish" gets cracked, mainly where the wires are bent. ATEQ has developed a leak test to detect this defect using ionized air technology to ensure the motor coil doesn't lose current, which reduces the motor's power.

#### **OUR RECOMMENDED PRODUCTS**







### **H2 TANK LEAK TEST**

ATEQ can provide leak and flow testing solutions for your hydrogen fuel tank components.

- Tank
- Valves
- Tubing

#### — H2 TANK

Hydrogen tanks are typically tested for manufacturing defects using differential pressure decay leak testers. Flow testers are the best choice when testing tubing since they require fluids to pass through at a designated rate. For valves on the tank, a special kind of flow tester can be used to create a ramp in pressure by being programmed to automatically trigger a continuous flow test once the pressurized part reaches a designated pressure.

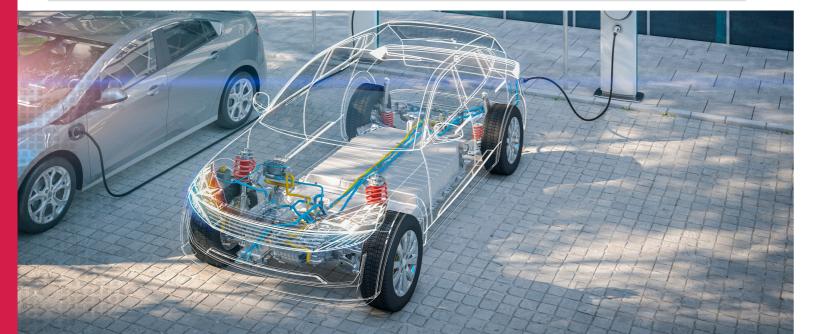
#### **OUR RECOMMENDED PRODUCTS**

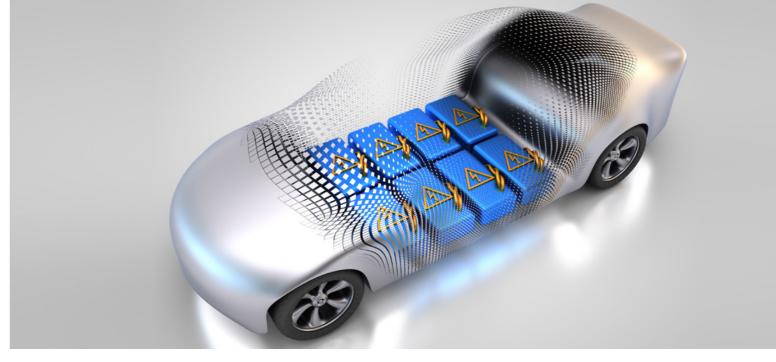
D620



F620







### **ELECTRONICS LEAK TEST**



ATEQ can provide leak and flow testing solutions for electronics in e-vehicles.

- Cameras
- Connectors
- Sensors

- Wiring
- Plugs & Sockets
- Lidars

#### — DESIGNED TO ASSIST VEHICLE WORKSHOPS

The new electric vehicles come with a variety of electronic components, including automated driving assistance that uses sensors to feel the environment. Whether the sensors are cameras, lidar, or something else, the sensors are in leak-tight housings since they are exposed to the elements.

Other sensors, like TPMS sensors (Tire pressure monitoring system), also need to be leak-tight during wheel and vehicle assembly and at maintenance level. An ingress air leak test performed in a custom chamber is generally preferred to test these sealed electronics.

#### **OUR RECOMMENDED PRODUCTS**

F620



F670







TIRE PRESSURE TEST

Besides leak testing the tires with our standard line of leak testers, ATEQ also offers aftermarket and industrial TPMS tools.





### TIRE SENSOR MONITORING

ATEQ's aftermarket TPMS tools read tire data like pressure and temperature to make sure the tires are within in a safe operating range. These tools help mechanics activate, diagnose, and program TPMS sensors in tires.

ATEQ's line of industrial TPMS tools are customized to test and activate TPMS sensors on vehicle tires on manufacturing production lines.

#### **OUR RECOMMENDED PRODUCTS**







## **GROUND BONDING TEST**



ATEQ offers ground bonding testers to use on the body of any type of vehicle to ensure the ground points are electrically well-connected between each other and the main ground.



#### — GROUND BONDING

Bonding testers work by testing the current at various points on the body of a vehicle to see if the current is consistent.

#### **OUR RECOMMENDED PRODUCTS**







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