

Averna's Electric Vehicle

Power Components EOL Test Platform



Regardless of your **EV power component** application, trust Averna's **test expertise** to accelerate time to market. With a customizable and fully scalable EV test platform, automate **safety, functional, and leakage** tests with **part labeling** and **quality inspection** for common EV ECU modules. Select only the functionalities required for the application or link multiple systems together for a total solution.

Partially or Fully Automated

EV Test Processes

Take advantage of this platform approach and reduce cost, risk and time to market for:

- Inverters;
- DC DC modules;
- On Board Charges (OBC);
- Battery Management Solutions BMS/TMS;
- Small Motors/Actuators;
- Power Distribution Units (PDU);
- Other Power Electronic Modules.



Fully-optioned automated EV test platform.



In-line testing with conveyor belt.

| | Safety & Insulation | Functional | Leakage | AOI/Laser |
|--|---|---|--|---|
| Test Types | Isolation Resistance IR High Voltage HV AC | Calibration Performance Power Noise, vibration, and harshness (NVH) | Cooling Circuit Housing Connectors | 3D Pin Inspection Quality Labeling Lasering |
| Parameters to Measure | Leakage Current (mA) Isolation Resistance (Ω) | Communication, Interface Tests (CAN, LIN, etc.) Power, Power Factor, Efficiency (W, A, V, PF, THD) Sensors Tests (ex. Temperature Sensors) Programming / Flashing / Security Configuration | Pressure Difference or Flow Methods | Optical Tests: Presence, OCR, etc. |
| Cooling System | NA | If required (Option) | NA | NA |
| Station Dimensions - Typical (mm/in) | 600x x 1000 x 2000 24 x 39 x 79 | 600x x 1000 x 2000 24 x 39 x 79 | 600x x 1000 x 2000 24 x 39 x 79 | 1000x x 1000 x 2000 39 x 39 x 79 |
| DUT Size Envelope - Typical (mm/in) | 400 x 400 x 200 16 x 16 x 8 | | | |
| Handling Time | Approx. 10s | Approx. 10s | Approx. 10s | Approx. 10s |
| Loading / Unloading / Connection to DUT | Automatic, Inline System | Automatic, Inline System | Automatic, Inline System | Automatic, Inline System |
| Internal Transport / Conveyor | Customizable, e.g.TS2 Bosch | Customizable, e.g.TS2 Bosch | Customizable, e.g.TS2 Bosch | TS2 Bosch Robot (Option) |
| Communication Type Between Stations | Customizable, e.g.SMEMA | Customizable, e.g.SMEMA | Customizable, e.g.SMEMA | Customizable, e.g.SMEMA |
| External Data Interface | MES, OPC UA (TSN), TCP-IP, PLC Connectors | | | |
| Return Pallet Conveyor | Optional | | | |

