



connect to detect.

IS YOUR BATTERY TESTING MISSING THE MOST IMPORTANT PARTS?

AVILOO Flash Test vs Autel Blitz Test — measured against three requirements essential for a genuine EV battery health check



WHAT A GENUINE BATTERY HEALTH TEST REQUIRES



Miss any one of these three, and a real fault can go undetected, costing \$1,000's



1. Dynamic-load cell balance, Open Circuit Voltage (OCV)

Cell voltage delta assessed under load over a multi-minute window, read against each cell's own OCV, compared to typical values — not just a snapshot of raw numbers.

WHY IT MATTERS

A cell can look fine sitting still, a snapshot won't catch it. Faults often only show up once the pack is under some load, and a raw voltage number means little without knowing what's normal for that specific cell — so faults get missed, or misjudged as nothing.



2. BMS State of Health corrected against real-world data

The OEM's own BMS SoH figure checked against real-world energetic capacity via a model-specific dataset — the same energy-based principle UN GTR22 sets for OEM reporting.

WHY IT MATTERS

OEMs calibrate their BMS for warranty and comfort, not resale accuracy. Repeating that number as-is means repeating the manufacturer's own estimate — not an independent check on whether it's actually true. The OEM SoH is often incorrect.



3. Sensor diagnostics beyond error codes

Faults are detected even when the OEM's BMS hasn't raised a warning or error code of its own — because the absence of a code isn't the same as the absence of a problem.

WHY IT MATTERS

An OEM only sets an error code once a fault crosses its own internal threshold. A real, worsening problem that hasn't crossed that line yet is invisible to any tool that only reads what the BMS already flags.

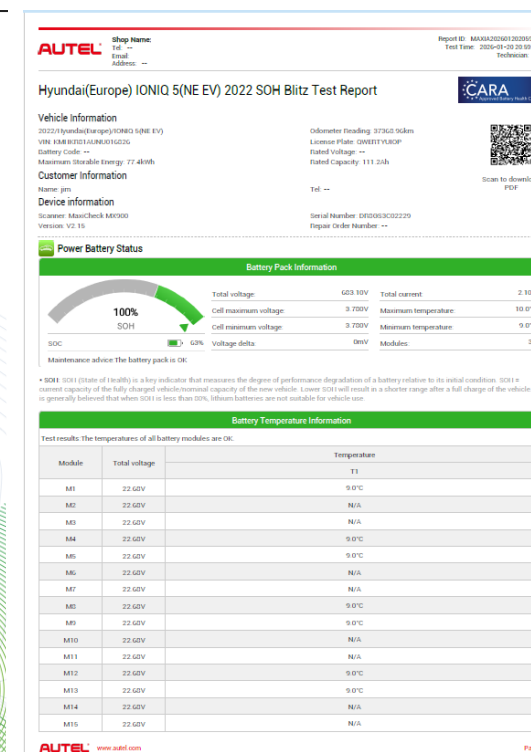
Without all three, a dealer — and their customer — is at risk of a real fault being missed or hidden behind a number that looks fine.

And a battery condition claim a dealer can't back up is a **s.18 ACL** problem waiting to happen.

TEST
EV

AVILOO Flash Test vs Autel Blitz Test, against the three-part benchmark

Requirement	AVILOO	Autel Blitz Test
1. Dynamic-load cell delta, OCV-interpreted	YES — OCV-mapped heatmap, severity-graded	NO — raw cell voltages only, no OCV assessment
2. BMS SoH corrected against real-world data	YES — independently calculated from cell-level data	NO — reports the BMS figure as-is
3. Sensor diagnostics beyond error codes	YES — flags anomalies the BMS hasn't coded	NOT ESTABLISHED — relies on BMS-reported data
4. Operator effort required	None — plug in via OBD-II, fully automatic set up and report	Operator must know the pack's capacity including voltage and cell count



Also: AVILOO is CARA Approved (independent/Premium tier) + TÜV-certified, $\pm 3\%$ stated accuracy. Autel Blitz Test is CARA Approved (Basic tier – an OEM-referenced ReadOut Value), “meets manufacturer standard ($\pm 10\%$)” per Autel’s own figure. All figures reported by or per AVILOO, not independently audited by Test EV.

WHAT THIS ACTUALLY LOOKS LIKE IN THE SHOP

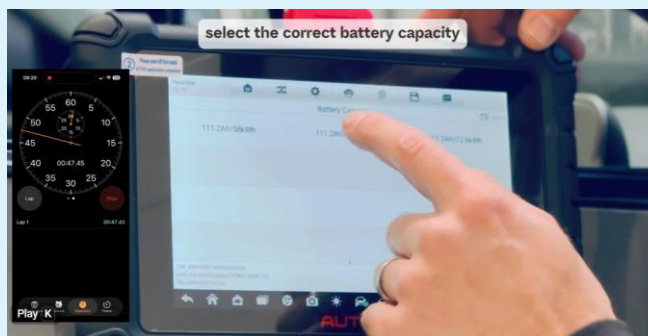
Two gaps that don't show up in a spec sheet, but do show up on the workshop floor

Getting the test right

AVILOO: plugs in via OBD-II and the test runs itself. The operator doesn't need to know anything about the vehicle beforehand.

Autel: the operator has to correctly identify the pack's voltage, capacity and cell count before the reading logic applies — detail that varies by model and trim, and that most workshop staff don't carry in their heads across every brand on the lot. Wasting time and misleading output

Get the input wrong and the tool doesn't always fail visibly — it produces a wrong set of numbers.



From Autel online video, selecting Ioniq 5 battery size

Reading the result

AVILOO: a colour-coded, severity-graded heatmap on page 2 of every report. A salesperson can see exactly where a problem sits in the pack, in plain English — no analytical battery knowledge needed.

Autel: a numeric table of raw cell voltages, module by module. Working out whether a given spread is normal or a fault requires knowing that cell's chemistry and OCV curve — needing expert knowledge, not a plain-English answer.



Clear and simple

WHAT A CLEAN BMS NUMBER CAN STILL HIDE



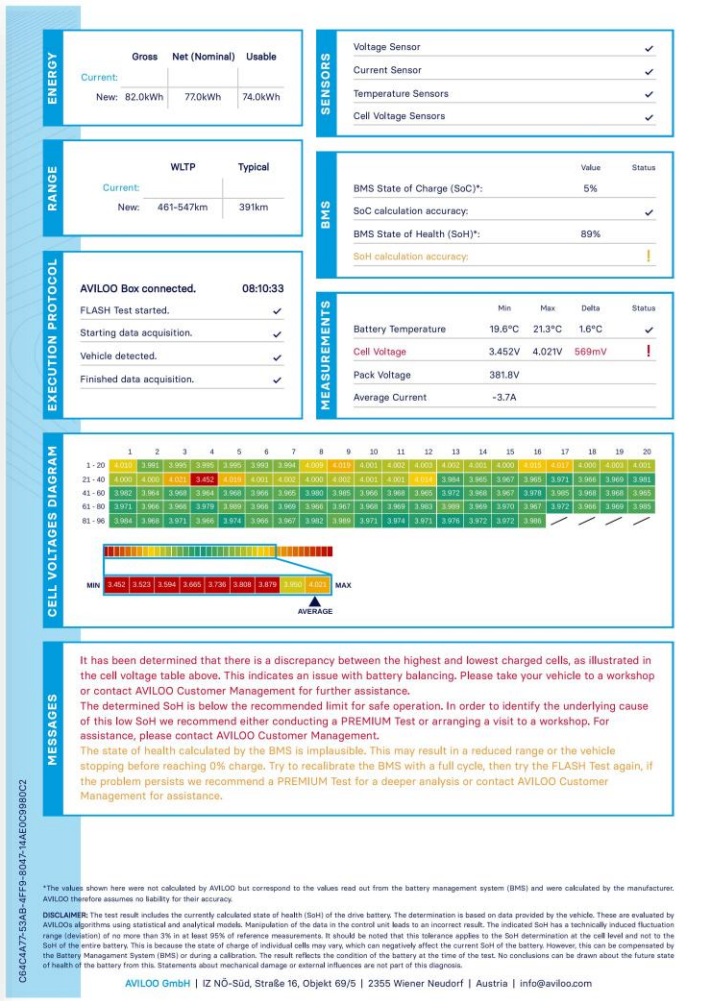
AVILOO's own documented examples – not Autel-tested vehicles, but the same BMS-reliance risk

This EV detected a large 569mV cell voltage imbalance and an implausible BMS provided SoH.

Only independently assessed values reveal issues like these.

BMS		Value	Status
	BMS State of Charge (SoC)*:	5%	
	SoC calculation accuracy:		✓
	BMS State of Health (SoH)*:	89%	
	SoH calculation accuracy:		!

MEASUREMENTS		Min	Max	Delta	Status
	Battery Temperature	19.6°C	21.3°C	1.6°C	✓
	Cell Voltage	3.452V	4.021V	569mV	!
	Pack Voltage	381.8V			
	Average Current	-3.7A			



THE BOTTOM LINE



If a buyer later alleges a battery condition representation was misleading under [s.18 of the Australian Consumer Law](#), the question that matters is: what evidence did the dealer rely on when making that representation?

Autel's Blitz Test meets one part of the standard reasonably well — it's fast and widely available — but it doesn't independently verify the BMS figure, doesn't interpret cell voltage delta against OCV, and puts the burden of detailed battery pack-specification knowledge on the operator.

AVILOO meets all three elements of the standard we use to certify battery health — automatically, without asking your operator to already be a battery engineer or EV expert.

AVILOO is TÜV-certified and CARA Approved, with over 1 million tests completed globally (July 2026) and over 100 devices deployed in Australia



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