INDEPENDENT

BATTERY CERTIFICATE

AVILOO
BATTERY DIAGNOSTICS

CERTIFICATE NUMBER: DF787E3C-8615-47EA-AD3F-C1A488DD1B3E

VEHICLE

BRAND: Hyundai
MODEL: Ioniq 5 - 72,6 kWh

MILEAGE: 38,696 km
VIN: KMHKN81AFNU008440
DATE AND TIME:
09.09.2025, 14:34:18

EXECUTED BY: Carla AB

RESULTS

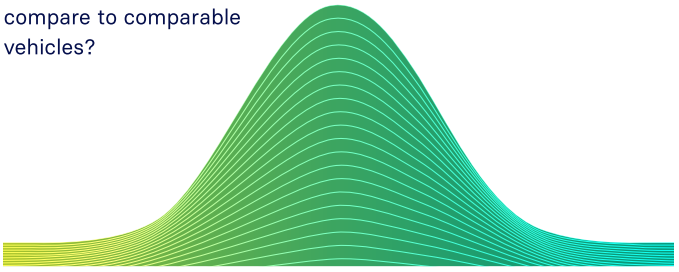
STATE OF HEALTH (SOH)

ENERGY - kWh | 73kWh

WLTP RANGE - | 481km

RATING

BENCHMARKING
How does your vehicle compare to comparable vehicles?



below average | average | above average

CHECKS

Battery Management System (BMS) - warning detected	!
Battery Sensor	✓
Battery Measurements - safety risk detected	!
Battery Cell Voltages	✓
Vehicle Communication	✓

SCAN FOR DETAILS

EVALUATION

SAFETY RISK! - POTENTIAL SAFETY HAZARD

During the detailed battery diagnosis with the AVILOO FLASH Test, safety concerning anomalies were detected that require immediate inspection. For Details scan the QR code.

For assistance, please contact AVILOO Customer Management.

Dr. Marcus Berger, CEO

CARA Approved Battery Health Check

ENERGY

	Gross	Net (Nominal)	Usable
Current:			
New:	77.0kWh	72.6kWh	68.9kWh

RANGE

	WLTP	Typical
Current:		
New:	430-481km	344km

EXECUTION PROTOCOL

AVILOO Box connected. **14:34:14**

- FLASH Test started. ✓
- Vehicle detected. ✓
- Starting data acquisition. ✓
- Finished data acquisition. ✓
- Analyzing data. ✓
- Analysis completed. ✓

SENSORS

Voltage Sensor	✓
Current Sensor	✓
Temperature Sensors	✓
Cell Voltage Sensors	✓

BMS

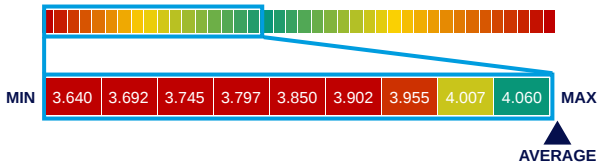
	Value	Status
BMS State of Charge (SoC)*:	60%	
SoC calculation accuracy:		✓
BMS State of Health (SoH)*:	100%	
SoH calculation accuracy:		!

MEASUREMENTS

	Min	Max	Delta	Status
Battery Temperature	20.0°C	21.0°C	1.0°C	✓
Cell Voltage	3.640V	4.060V	420mV	!
Pack Voltage	731.0V			
Average Current	-1.0A			

CELL VOLTAGES DIAGRAM

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 - 20	4.060	4.043	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.040	4.060	4.060	4.060
21 - 40	4.060	4.040	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.040	4.060	4.060	4.060
41 - 60	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.040	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060
61 - 80	4.040	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.040	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.040
81 - 100	4.040	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.040	4.060	4.060	4.040	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060
101 - 120	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.040	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060
121 - 140	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.040	4.060	4.060
141 - 160	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.040	4.060	4.060	4.060	4.060	4.060
161 - 180	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.040	4.060	3.640	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060	4.060



MESSAGES

It has been determined that there is a discrepancy between the highest and lowest charged cells, as illustrated in the cell voltage table above. This indicates an issue with battery balancing. Please take your vehicle to a workshop or contact AVILOO Customer Management for further assistance.

The state of health calculated by the BMS is implausible. This may result in a reduced range or the vehicle stopping before reaching 0% charge. Try to recalibrate the BMS with a full cycle, then try the FLASH Test again, if the problem persists we recommend a PREMIUM Test for a deeper analysis or contact AVILOO Customer Management for assistance.

The determined SoH is below the recommended limit for normal operation. In order to identify the underlying cause of this low SoH we recommend either conducting a PREMIUM Test or arranging a visit to a workshop. For...

*The values shown here were not calculated by AVILOO but correspond to the values read out from the battery management system (BMS) and were calculated by the manufacturer. AVILOO therefore assumes no liability for their accuracy.

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