

INDEPENDENT BATTERY CERTIFICATE



CERTIFICATE NUMBER: 209FD08E-ABD0-4FF0-94CC-6B87FAC27EB1

VEHICLE

BRAND: Hyundai
MODEL: Ioniq 5 - 77,4 kWh

MILEAGE: 21,609 mi
VIN: KM8KMDDF3RU282039
DATE AND TIME:
9/17/26, 7:11 AM

EXECUTED BY: Reds Auto and Truck

RESULTS

Independent
STATE OF HEALTH (SOH)

95.4 %

ENERGY

74kWh | 77kWh



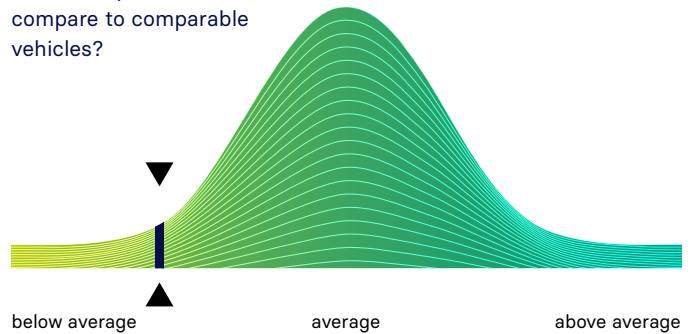
WLTP RANGE

300mi | 315mi

RATING

BENCHMARKING

How does your vehicle
compare to comparable
vehicles?



CHECKS

Battery Management System (BMS) ✓

Battery Sensor ✓

Battery Measurements ✓

Battery Cell Voltages ✓

Vehicle Communication ✓



SCAN FOR DETAILS

EVALUATION

GOOD HEALTH - NO ABNORMALITIES DETECTED

Based on the detailed battery diagnostics performed with the AVILOO FLASH Test, we hereby certify that the drive battery of this vehicle is in good condition.

The drive battery is therefore officially AVILOO Certified.

Marcus Berger

Dr. Marcus Berger, CEO



ENERGY

	Gross	Net (Nominal)	Usable
Current:	76.3kWh	73.8kWh	70.0kWh
New:	80.0kWh	77.4kWh	73.4kWh

RANGE

	WLTP	Typical
Current:	269-300mi	214mi
New:	282-315mi	225mi

EXECUTION PROTOCOL

AVILOO Box connected. 07:11:20

FLASH Test started.	✓
Vehicle detected.	✓
Data acquisition started.	✓
Data acquisition completed.	✓
Data analysis started.	✓
Data analysis completed.	✓

SENSORS

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

BMS

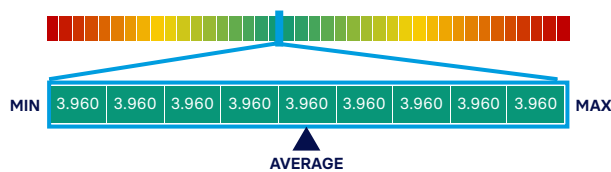
	Value	Status
BMS State of Charge (SoC)*:	84%	
SoC calculation accuracy:		✓
BMS State of Health (SoH)*:	94%	
SoH calculation accuracy:		✓

MEASUREMENTS

	Min	Max	Delta	Status
Battery Temperature	71.6F	73.4F	1.8F	✓
Cell Voltage	3.960V	3.960V	0mV	✓
Pack Voltage	761.2V			
Average Current	-0.3A			

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	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960
21 - 40	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960
41 - 60	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960
61 - 80	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960
81 - 100	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960
101 - 120	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960
121 - 140	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960
141 - 160	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960
161 - 180	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960
181 - 192	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960	3.960



*The values shown here were read directly from the vehicle's battery management system (BMS) and are calculated and provided by the vehicle manufacturer. The State of Health (SoH) displayed corresponds to the value reported by the BMS and is CARA-certified.

DISCLAIMER: The test result includes the currently calculated state of health (SoH) of the drive battery. The determination is based on data provided by the vehicle. These are evaluated by AVILOO's algorithms using statistical and analytical models. Manipulation of the data in the control unit leads to an incorrect result. The indicated SoH has a technically induced fluctuation range (deviation) of no more than 3% in at least 95% of reference measurements. It should be noted that this tolerance applies to the SoH determination at the cell level and not to the SoH of the entire battery. This is because the state of charge of individual cells may vary, which can negatively affect the current SoH of the battery. However, this can be compensated by the Battery Management System (BMS) or during a calibration. The result reflects the condition of the battery at the time of the test. No conclusions can be drawn about the future state of health of the battery from this. Statements about mechanical damage or external influences are not part of this diagnosis.