

INDEPENDENT BATTERY CERTIFICATE



CERTIFICATE NUMBER: 9B0EBB50-2E5D-4296-9FDA-0881BCAAA860

VEHICLE

BRAND: Hyundai
MODEL: Ioniq 5 N - 84 kWh

MILEAGE: 11,183 km
VIN: KMHKN818RRU000774
DATE AND TIME:
10/09/2026, 13:05

EXECUTED BY: Carma

RESULTS

Independent
STATE OF HEALTH (SOH)

98.7 %

ENERGY 79kWh | 80kWh

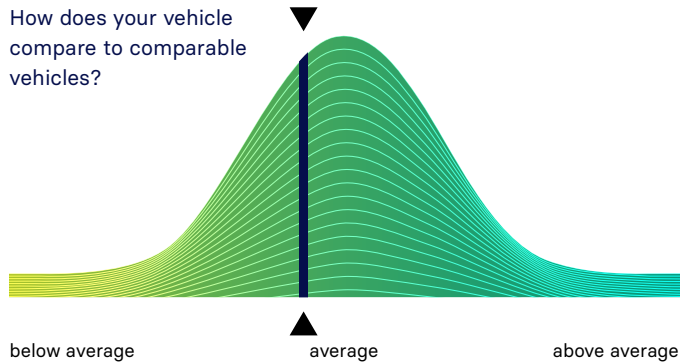


WLTP RANGE 442km | 448km

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

EXCELLENT 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 excellent condition.

The drive battery is therefore officially AVILOO Certified.

Marcus Berger

Dr. Marcus Berger, CEO



ENERGY

	Gross	Net (Nominal)	Usable
Current:	82.9kWh	78.9kWh	77.0kWh
New:	84.0kWh	80.0kWh	78.0kWh

RANGE

	WLTP	Typical	Individual
Current:	442km	343km	312km
New:	448km	348km	316km

EXECUTION PROTOCOL

AVILOO Box connected. 13:05:53

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

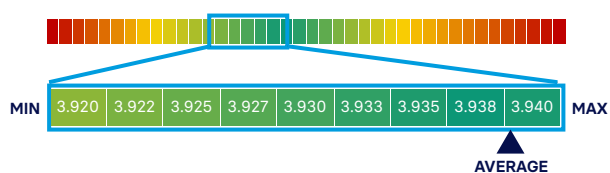
	Value	Status
BMS State of Charge (SoC)*:	75%	
SoC calculation accuracy:		✓
BMS State of Health (SoH)*:	100%	
SoH calculation accuracy:		✓

MEASUREMENTS

	Min	Max	Delta	Status
Battery Temperature	26.0°C	35.0°C	9.0°C	✓
Cell Voltage	3.920V	3.940V	20mV	✓
Pack Voltage	756.4V			
Average Current	-8.6A			

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	3.921	3.920	3.925	3.932	3.926	3.923	3.938	3.933	3.938	3.940	3.936	3.922	3.932	3.923	3.936	3.938	3.936	3.935	3.940	3.931
21 - 40	3.940	3.940	3.940	3.938	3.920	3.921	3.920	3.937	3.925	3.922	3.940	3.940	3.940	3.940	3.940	3.929	3.920	3.929	3.940	3.931
41 - 60	3.939	3.923	3.927	3.940	3.940	3.940	3.940	3.939	3.920	3.931	3.940	3.940	3.940	3.940	3.940	3.940	3.940	3.940	3.940	3.931
61 - 80	3.923	3.936	3.932	3.933	3.932	3.940	3.940	3.940	3.940	3.940	3.940	3.940	3.933	3.940	3.940	3.940	3.940	3.940	3.940	3.940
81 - 100	3.940	3.940	3.940	3.940	3.936	3.940	3.940	3.940	3.940	3.940	3.940	3.940	3.940	3.940	3.940	3.940	3.921	3.921	3.922	3.928
101 - 120	3.935	3.940	3.940	3.940	3.940	3.940	3.940	3.934	3.920	3.920	3.940	3.940	3.939	3.940	3.940	3.932	3.940	3.940	3.940	3.940
121 - 140	3.920	3.939	3.938	3.924	3.920	3.926	3.940	3.940	3.940	3.940	3.940	3.928	3.922	3.921	3.926	3.922	3.934	3.928	3.932	3.940
141 - 160	3.939	3.939	3.939	3.932	3.920	3.920	3.920	3.922	3.924	3.922	3.922	3.935	3.940	3.940	3.940	3.933	3.920	3.920	3.920	3.931
161 - 180	3.940	3.921	3.940	3.938	3.940	3.940	3.940	3.939	3.920	3.926	3.932	3.925	3.929	3.926	3.923	3.928	3.940	3.931	3.936	3.925
181 - 192	3.921	3.920	3.926	3.932	3.928	3.929	3.935	3.940	3.940	3.940	3.940	3.938	/	/	/	/	/	/	/	/



*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.