

INDEPENDENT BATTERY CERTIFICATE



CERTIFICATE NUMBER: 3F1C1420-8AA3-47A3-BA09-E809A3C7E814

VEHICLE

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

MILEAGE: 21,986 mi
VIN: KM8KNDDFXRU274081
DATE AND TIME:
8/27/26, 11:11 AM

EXECUTED BY: Reds Auto and Truck

RESULTS

Independent
STATE OF HEALTH (SOH)

98.3 %

ENERGY

76kWh | 77kWh



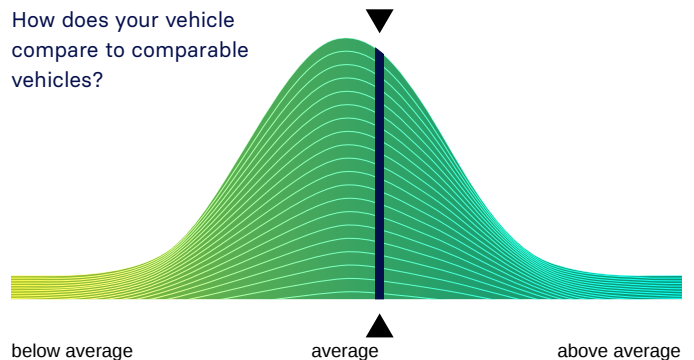
WLTP RANGE

309mi | 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

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:	78.6kWh	76.0kWh	72.1kWh
New:	80.0kWh	77.4kWh	73.4kWh

RANGE

	WLTP	Typical
Current:	277-309mi	221mi
New:	282-315mi	225mi

EXECUTION PROTOCOL

AVILOO Box connected.	11:11:09
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

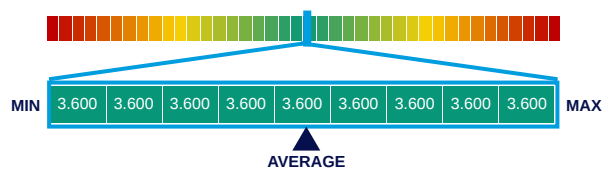
	Value	Status
BMS State of Charge (SoC)*:	30%	
SoC calculation accuracy:		✓
BMS State of Health (SoH)*:	100%	
SoH calculation accuracy:		✓

MEASUREMENTS

	Min	Max	Delta	Status
Battery Temperature	71.6F	73.4F	1.8F	✓
Cell Voltage	3.600V	3.600V	0mV	✓
Pack Voltage	691.6V			
Average Current	-2.4A			

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	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600
21 - 40	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600
41 - 60	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600
61 - 80	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600
81 - 100	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600
101 - 120	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600
121 - 140	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600
141 - 160	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600
161 - 180	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600
181 - 192	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600	3.600



*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.