INDEPENDENT

Electric Vehicle Battery Certificate

Certificate issued by

Optiledger

Certificate creation time: 2026-11-02, 09:48

Certificate number: 20261102.54

Vehicle information

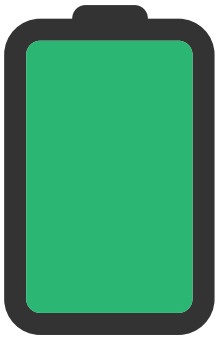
Registration number / VIN	Brand / Model	Odometer	Battery type
GRJ17N / KNAGV81FBL5040562	KIA Optima	160990 km	NMC

Test results

Date and time of test: 2026-11-02, 09:32

Test performed by: kvdbil

State of health (SOH)



100 %

Battery capacity

Estimated capacity



Factory new capacity

WLTP range

Estimated WLTP 53 km



Factory new WLTP 53 km

Diagnostics

	MIN	MAX	DELTA
Battery temperature	18.0°C	18.0°C	0.0°C
Cell voltage	3.46V	3.46V	0mV

Cell voltages

1–24	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460
25–48	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460
49–72	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460
73–96	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460	3.460

Normal: Cell voltage deviation is within the expected range.

Method and control

Battery assessment is based on diagnostic data retrieved from the vehicle's OEM Battery Management System (BMS) and comparative reference data from similar vehicle models.

Attest

The test was executed according to the OptiLedger SOH procedure with no known technical issues during data acquisition.

Disclaimer

Results represent an estimated assessment of battery condition at the time of testing and do not constitute a warranty or guarantee of battery capacity, performance, or remaining lifetime. The original WLTP range is determined and published by the vehicle manufacturer under standardized laboratory test conditions. The estimated WLTP presented in this report is calculated from diagnostic data and reference parameters and does not represent actual driving range. Real-world range may vary depending on driving conditions, temperature, load, and driving behavior. Full methodology, limitations and liability disclaimer available at: https://optiledger.se/legal/optiledger_battery_test_methodology_and_disclaimer.pdf.

Contact us: contact@optiledger.se