INDEPENDENT

Electric Vehicle Battery Certificate

Certificate issued by

Optiledger

Certificate creation time: 2026-10-28, 14:28

Certificate number: 20261028.187

Vehicle information

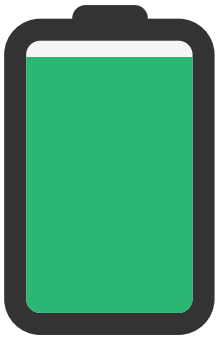
Registration number / VIN	Brand / Model	Odometer	Battery type	Charging port type
HKK78N / WVGZZZE2XPE082968	Volkswagen ID.4	119170 km	NMC	CCS

Test results

Date and time of test: 2026-10-22, 09:21

Test performed by: kvdbil

State of health (SOH)



94 %

Battery capacity

Estimated capacity: 72.4 kWh

Factory new capacity: 77.0 kWh

WLTP range

Estimated WLTP: 461 km

Factory new WLTP: 490 km

Diagnostics

	MIN	MAX	DELTA
Battery temperature	12.9°C	13.4°C	0.5°C
Cell voltage	4.044V	4.053V	9mV

Cell voltages

1–24	4.051	4.052	4.053	4.050	4.051	4.051	4.051	4.051	4.051	4.052	4.051	4.050	4.052	4.052	4.051	4.050	4.053	4.052	4.051	4.050	4.052	4.051	4.052	4.051
25–48	4.051	4.050	4.050	4.049	4.051	4.050	4.050	4.050	4.044	4.051	4.050	4.051	4.051	4.050	4.051	4.052	4.052	4.051	4.050	4.052	4.053	4.051	4.052	4.051
49–72	4.052	4.051	4.052	4.052	4.053	4.051	4.052	4.052	4.052	4.051	4.052	4.052	4.051	4.050	4.052	4.052	4.052	4.050	4.051	4.051	4.051	4.050	4.052	4.052
73–96	4.052	4.048	4.052	4.052	4.052	4.050	4.052	4.051	4.052	4.049	4.052	4.052	4.052	4.051	4.052	4.052	4.051	4.050	4.053	4.052	4.051	4.051	4.052	4.052

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