INDEPENDENT

Electric Vehicle Battery Certificate

Certificate issued by

Optiledger

Certificate creation time: 2026-10-28, 11:45

Certificate number: 20261028.117

Vehicle information

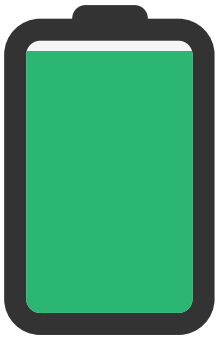
Registration number / VIN	Brand / Model	Odometer
FOJ02A / WBA41EU0XR9T29123	BMW X5	124580 km

Test results

Date and time of test: 2026-10-28, 09:53

Test performed by: kvdbil

State of health (SOH)



96 %

Battery capacity

Estimated capacity



Factory new capacity

WLTP range

Estimated WLTP 100 km



Factory new WLTP 104 km

Diagnostics

	MIN	MAX	DELTA
Battery temperature	9.2°C	10.9°C	1.7°C
Cell voltage	3.946V	3.953V	7mV

Cell voltages

1–24	3.951	3.951	3.948	3.947	3.951	3.952	3.950	3.953	3.951	3.951	3.950	3.950	3.951	3.950	3.952	3.946	3.950	3.951	3.950	3.949	3.948	3.948	3.950	3.950
25–48	3.947	3.948	3.949	3.949	3.949	3.949	3.950	3.949	3.953	3.950	3.947	3.953	3.947	3.950	3.948	3.950	3.950	3.952	3.949	3.952	3.950	3.949	3.949	3.951
49–72	3.951	3.949	3.949	3.950	3.952	3.951	3.951	3.949	3.949	3.950	3.949	3.950	3.950	3.950	3.949	3.950	3.947	3.950	3.950	3.949	3.951	3.948	3.947	3.952
73–88	3.950	3.953	3.951	3.953	3.950	3.952	3.951	3.948	3.950	3.949	3.950	3.951	3.949	3.950	3.949	3.951								

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