



WHITE PAPER

# AVL Benchmarking Program – Vehicle, Systems and Components

BMW iX3 50 XDrive

# AVL Benchmarking Program Vehicle, Systems and Components

In depth analysis of **BMW iX3 50 XDrive**

COMPREHENSIVE BENCHMARK STUDY ON  
DIFFERENT LEVELS INCLUDING:



Vehicle



System



Component



Software  
Architecture

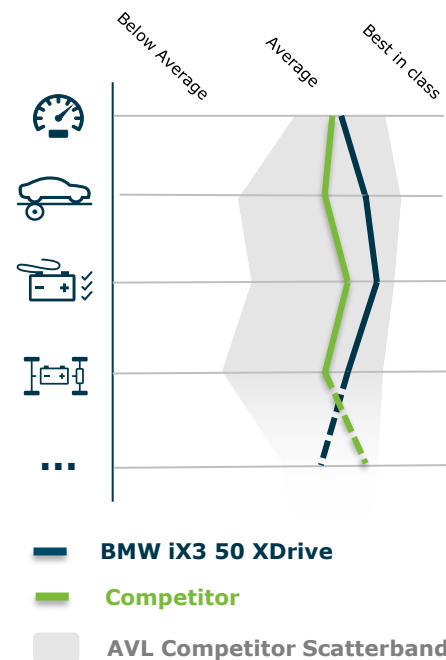
## DELIVERABLES

- Vehicle, System and Component Benchmarking Reports
- Measurement raw data
- Bill of materials and cost analysis for selected systems and components like e-Drive and battery
- Know how transfer workshops



## AVL COMPETITOR SCATTERBANDS

- Objective assessment and evaluation including root cause analysis
- Standing against competitors out of AVLs benchmark database highlighted in competitive landscape
- Bill of materials
- Cost modelling



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AVL Benchmarking

BMW iX3 50 XDrive

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# AVL Benchmarking Program

## The BMW iX3 50 XDrive

The BMW iX3 50 XDrive demonstrates benchmark-setting E-Performance, seamlessly blending sports-car acceleration (0–100 km/h in 4.9 s) with exceptional daily usability, tks to 345 kW (469 PS) and 645 Nm of torque. This performance is enabled by a state-of-the-art Gen6 eDrive system, centered on a 115 kWh NMC battery with 20 % greater energy density.

The vehicle's 800 V architecture is pivotal, unlocking ultra-fast charging at up to 400 kW to add 372 km of range in just 10 minutes.

BMW's zonal design, managed by four high-performance "superbrain" computers, eliminates 600 m of wiring and replaces traditional fuses with Smart eFuses. This innovation not only reduces complexity but delivers a tangible 20 % improvement in energy efficiency, establishing a new standard for sophistication and performance in electric powertrains.



**Gen6 eDrive (345 kW /800 V Architecture)**



**Up to 805 km WLTP range**



**BMW NMC Gen6 cylindrical cells with 20 % higher energy density**



**Smart eFuses replace 150 traditional circuit boards**



**115 kWh battery capacity**



**400 kW DC fast charging – 372 km in 10 Minutes**

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## DI CHRISTIAN JUWAN

Project Manager Vehicle Benchmark

Mail: [christian.juwan@avl.com](mailto:christian.juwan@avl.com)

Phone: +43 316 787 1659

Mobile: +43 664 8379342



Website: [Global Vehicle Benchmarking and Technology Scouting | AVL](#)



AVL List GmbH  
Hans-List-Platz 1  
8020 Graz  
Austria

Phone +43 316 787-0  
E-mail [info@avl.com](mailto:info@avl.com)  
[www.avl.com](http://www.avl.com)

