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## Press release

### **IPG Automotive Releases Version 12.0 of the CarMaker Product Family**

**Simulation and test software with new functionalities for virtual test driving**

**Karlsruhe, March 21, 2023: At the annual Open House Germany, IPG Automotive offered insights into the latest release of CarMaker. In addition to new tools for scenario parameterization and a new ground truth sensor model, new CarMaker functionalities for customizing the 3D environment will be available from March 29. The simulation and test software also enables scaling the generation of roads and offers more solutions for hybrid and electric vehicle applications thanks to its new battery model and a modular powertrain architecture.**

On March 21, IPG Automotive presented the new CarMaker release 12.0 more than 400 participants at its annual industry event, Open House Germany. With a new battery model and a new modular powertrain architecture, CarMaker is now also suited for hybrid and electric vehicle applications.

With CarMaker 12, users will benefit from a new ground truth sensor with a variety of data access options. The new function is based on the novel software framework which makes data extraction much easier for users. In addition, the user interface has been updated and made more user-friendly. The first available instance of the ground truth sensor will be an optimized version of the line sensor.

The new software version also features extended functionalities for scenario parameterization, which improves compatibility with the OpenSCENARIO



standard. Maneuver parameterization is now performed within the Scenario Editor.

The new Import & Export functionality helps optimize the new scenario generation, allowing road networks to be subdivided in individual segments and exported separately in the Scenario Editor. These segments can then be imported into other road networks as templates, and combined according to a modular principle. This makes generating templates and creating complex road networks easier.

With the new MovieNX Python API, users can now interact with the 3D environment and automate MovieNX. The HD scenario “Suburban Street” enables testing camera-based systems with high traffic density, a variety of pedestrian models and many every-day traffic obstacles.

In addition to the new CarMaker release, IPG Automotive presented a new product at the event: VIRTO, an app suite offering intuitive access to virtual vehicle development for a large community of design engineers. VIRTO enables development workflows for seamless and traceable simulation, reducing the complexity of simulation in the development of software-defined vehicles.

2,445 characters (including spaces)

## Image

[IPG\_CarMaker12]



*CarMaker 12 from IPG Automotive offers additional functionalities for processing the 3D environment.*

*Image: IPG Automotive*

## About IPG Automotive GmbH

As a global leader in virtual test driving technology, IPG Automotive develops innovative simulation solutions for vehicle development. Designed for seamless use, the software and hardware products can be applied throughout the entire development process, from proof-of-concept to validation and release. The company's virtual prototyping technology facilitates the automotive systems engineering approach, allowing users to develop, test and validate new systems in a virtual whole vehicle.

IPG Automotive is an expert in the field of virtual development methods for the application areas of Autonomous Vehicles, ADAS, Powertrain and Vehicle Dynamics, committed to providing support to master the growing complexity in these domains. Together with its international clients and partners, the company is pioneering simulation technology that is increasing the efficiency of development processes.



By taking real test driving into the virtual world as a complement to on-road testing, IPG Automotive contributes significantly to technical progress and shares in shaping the mobility of tomorrow with regard to comfort, safety, economic efficiency and environmental friendliness.

In addition to the company headquarters in Karlsruhe, Germany, IPG Automotive provides innovative development services to its customers and partners at the Germany-based offices in Braunschweig, Frankfurt, Stuttgart and Munich as well as in China, France, Japan, Korea, Sweden, the UK and the USA.

Further information at [www.ipg-automotive.com/en/press](http://www.ipg-automotive.com/en/press)

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