

HIGH MOBILITY [Follow](#)

HIGH MOBILITY brings #IoT services to the car industry through the use of a simple, universal API.

Join us to build apps and services for #connectedcars!

Feb 14 · 4 min read

Sportscar APIs for the Porsche NEXT OI Competition!



With only a couple of weeks until the official launch of the Porsche Next OI Competition on February 26th, excitement at HIGH MOBILITY is building.

To help you and your team prepare for the Porsche NEXT OI Competition we're releasing today the details of the sportscar-specific APIs you'll be able to use during the competition. Once you've selected the right APIs for your idea you'll then have the opportunity to test your app or service on the in-browser Porsche car emulator. This is your unique chance to test your application in a true-to-life, simulated environment—no car required!

There are over 140 APIs for you to play around with, and, to ease you in, SDKs for Android, iOS and Node.js in addition to a REST API, leaving you plenty of scope to try out, build and test your innovative ideas and industry-redefining services irrespective of your preferred operating system.

Let's dive in and take a look in a bit more detail at the APIs on offer.

Race

Let's kick off with the Race state API. This API covers a broad range of functions relating to acceleration, steering, gas, suspension, steering and braking for you to monitor via your application. If you're considering building an app or service that demands part or full disclosure of any of the following functions then make sure you check out this API:

- front lateral acceleration and rear lateral acceleration

- the understeering and oversteering state of the vehicle
- the position of the gas pedal from 0%—100% (full throttle)
- the steering angle
- brake pressure
- yaw-rate (a vehicle's angular velocity around its vertical axis)
- rear suspension steering
- ESP (Electronic Stability Program)
- brake torque vectoring
- gear mode from “parking” through to “sport”
- brake pedal position.

Charging

The Charging API offers many different functions for your application. By getting the vehicle Charge State you can see whether it is plugged in, charging or if the charging is complete. The battery level, current, charger voltage and charge limit can be accessed and the charge port state (open/closed) and charge mode can be identified. The charge timer can be identified and set, and charging can be stopped or started at will. The charge limit can also be altered depending on your preference.

Offroad

With the Offroad state API you can call up information to a smart device about the route incline and decline. In addition you can check the wheel suspension level of the vehicle which is displayed as a percentage between 0% (no suspension) and 100% (maximum suspension). If your application is reliant upon the state of the road, or the car's suspension, this API would be well worth looking into.

Chassis Settings

The Chassis Settings allow you to call up and adjust the Driving Mode state, from Regular through to Sport+. You can also check on the activity state of the Sport Chrono and switch it between active and inactive. Spring Rate can be viewed, and the maximum and minimum values can be adjusted or displayed. The position of the Chassis itself can also be seen via this API and is calculated from the lowest point. For an application or service that requires knowledge of the chassis and the mode of driving then this API is for you.

Universal Charger

The Universal Charger allows for three different states: disconnected, plugged in or charging and lets you know what plug type the charging

device has. Solar power charging can be activated or deactivated at your will and the following elements can be accessed and controlled:

- location
- charge current
- Wi-Fi hotspots
- hotspot security
- Wi-Fi hotspot password
- starting fee
- currency
- price

With so many features this API is worth exploring for numerous apps and services—check it out to see if it works for your unique idea.

Light Conditions

The Light Conditions API informs you of the light conditions in the immediate vicinity of the sports car as well as inside the vehicle itself. Both outside and inside illumination is measured in lux, and you can access it through the “Get Light Conditions” command. This API would be particularly useful if you want to inform the driver of what is going on outside the vehicle, or if you’d like to change the conditions within the car depending on the external conditions.

Weather Conditions

Similarly to the Light Conditions API, the Weather Conditions API reports on the external weather conditions in the vicinity of the vehicle. The API identifies the intensity of rain, on a scale of 0% (no rain) to 100% (maximum rain) and is accessed through the “Get Weather Conditions” command. Perhaps your app idea is to alert the driver of upcoming weather conditions, the chance of rain throughout the day or an alert for ice on the road. If so, the Weather Conditions API will be your essential tool.

— —

If these APIs have whet your appetite then you’ll be pleased to hear there are even more on offer! In fact, aside from the APIs mentioned above, there are a whole range of other APIs for you to experiment with including vehicle location, door states, other chassis functions and diagnostics information. Altogether you’ll find 140+ data sources and functions for every kind of sports car application.

We would love to hear what you think about the new functions!

With just two weeks to go until the launch of the Porsche NEXT OI Competition there’ll be more platform updates and competition-specific news coming to you very soon. Stay tuned!

