

Mercedes-AMG brings F1 hybrid tech from race track to road

The Mercedes-AMG Project One premiered at the International Motor Show (IAA) in Frankfurt/Main. According to the car manufacturer, the two-seater supersports show car brings the latest fully-fledged Formula 1 hybrid technology from the race track to the road.



The car is said to produce over 740kW and reach top speeds beyond 350km/h.

The high-performance plug-in hybrid drive system of the Mercedes-AMG Project One comes directly from Formula 1. It consists of a highly integrated and intelligently networked unit comprising one hybrid, turbocharged combustion engine with a total of four electric motors. One has been integrated into the turbocharger, another has been installed directly on the combustion engine with a link to the crankcase and the two remaining motors drive the front wheels.

The 1.6-litre V6 hybrid petrol engine with direct injection and electrically assisted single turbocharging comes directly from the Mercedes-AMG Petronas Formula 1 racing car. The four overhead camshafts are driven by spur gears. To achieve high engine speeds, the mechanical valve springs have been replaced by pneumatic valve springs.



The vehicle is mid-engined (ahead of the rear axle) and it can easily reach speeds of 11,000rpm, which is currently unique for a road-going vehicle. However, for higher longevity and the use of commercially available Super Plus petrol instead of racing fuel, it remains significantly below the F1 engine speed limit.

Technical data at a glance

Rear-wheel drive	1.6-litre V6 with direct injection, four valves per cylinder, four overhead camshafts and electrically boosted single turbocharger, electric motor connected to the crankshaft
Displacement	1,600 cc
Rear-wheel drive output	> 500kW
Front-wheel drive output	2 x 120kW
System output	> 740kW (> 1,000 hp)
Electric range	25km
Drive system	Variable AMG Performance 4MATIC+ all-wheel drive with hybrid-drive rear axle, electrically driven front axle and torque vectoring
Transmission	Automated AMG SPEEDSHIFT 8-speed manual transmission
Acceleration 0-200 km/h	< 6 secs.
Top speed	> 350km/h

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