## **Opel Ampera PHEV**

It is a series PHEV (range extender).

The range of the Opel Ampera with electric power only: 60 km.

The charger is on board. Charging time 3,5h. Standard plug for 230 Volt.

Batteries: Li-ion, water cooled, heated during frost.

Warranty 10 years.

Electricity cost of the charging process: about 1 EUR.

Electromotor: 150 pk; 370 Nm.

No gearbox.

For longer distances, the 1.3 litre petrol engine supplies the electric power. The engine can run on biofuel E85 (= mixture of gasoline and ethanol). Fuel consumption (with ICE running): 1,6 liter / 100 km  $CO_2$  emission: 40 g

Acceleration: 0 to 100 km/h in 9 seconds. Max speed 161 km/h.

Price 25000 - 30000 EUR



## **Opel Flextreme PHEV**

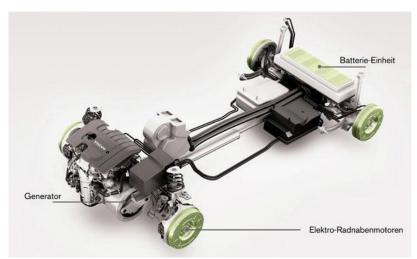
The range of the Flextreme with electric power (an 120 kW electric motor) is 55 km. For longer distances, a 1,3 litre diesel engine with a 53 kW peak generator supplies the electric power.



## Volvo C30 PHEV

The Plug-in-Hybrid Volvo C30 (concept car) is a series HEV. It has a 1,6 liter gasoline/bio-ethanol ICE. A synchronous generator charges the Li-polymer battery (ca. 100 km autonomy) when the battery SoC is lower than 30%. There are four electric wheel-motors.





Plug-in-Hybrid Volvo C30