

PLUG-IN HYBRID EDGE
POWERED BY HYBRID DRIVE™



How It Works

The Ford Edge with HySeries Drive™ is a battery powered plug-in hybrid with a fuel cell that operates as an on-board charger. The vehicle operates in "battery only" mode for the first 25 miles at speeds up to 85 miles per hour. When the battery is depleted to approximately 40%, the fuel cell auxiliary power unit (APU) automatically starts up and recharges the battery, giving the vehicle an additional 200 miles of range. The range can be increased to more than 300 miles with a high pressure tank. The fuel cell's sole function is to recharge the vehicle's lithium ion battery pack as needed, allowing this break-through technology to work like a portable generator, instead of an engine, as had been the case in previous fuel cell powered vehicles.



The vehicle is equipped with electrical charging and hydrogen fueling ports on the driver side of the vehicle, in the front and rear. The high voltage battery can be conveniently charged overnight from home or at work on either a 110 or 220 volt outlet. The hydrogen fuel tank holds 4.5 kg of hydrogen and takes about five minutes to fill. This is a zero emissions vehicle and when the fuel cell is

operating, only water vapour is emitted through the exhaust system. This advanced powertrain delivers an EPA combined city / highway fuel economy equivalent of 41 miles per gallon.

The architecture is fully flexible and adaptable to other power sources, which allows for flexibility during fuel cell development and hydrogen infrastructure expansion. The benefit of this design is that it allows the flexibility to swap out the fuel cell for a small combustion engine to recharge the lithium ion battery pack.

Hydrogen Port



Electricity Port



Interactive Display



Features

- Overnight Home Recharging (110 / 220 VAC)
- 25 Mile Range on Li-Ion Battery
- Zero Emission Hydrogen Fuel Cell APU
- 225 Mile Combined Range with Battery / Fuel Cell
- Uncompromised Interior Package
- Electric AWD

Overall Vehicle

Fuel Cell: 35kW Fuel Cell
 Motor: 130 kW Dual Electric Drives
 Hybrid Battery: 130 kW Li-Ion
 Hydrogen Storage: 350 bar, 4.5kg H2
 Weight: 2450kg
 Seating: 5 Passenger
 Range: 225 mi
 EPA Fuel Economy: 41mpg

65kW Electric Drive

Fuel Cell (APU)

Hydrogen Tank

130kW (336 Volt)
 Lithium-Ion Battery

65kW Electric Drive

