DaimlerChrysler Orion VII
Hybrid Transit Bus

Vehicle: 40-foot transit bus

Capacity: 73 passengers

Manufacturer: Orion Bus Industries, Inc.
DaimlerChrysler Commercial Buses North America
Greensboro, North Carolina

Powertrain: BAE Systems 'HybriDrive™' series diesel electric hybrid system with all-electric drive and regenerative braking

Engine: 5.9-Liter Cummins ISB diesel

Generator: Permanent magnet with 120kW continuous output

Electric Motor: 320 peak hp
250 continuous hp
2,700 lb-ft peak torque
2,100 lb-ft continuous torque

Batteries: 46 lead-acid, air-cooled batteries

Control System: Optimizes performance for emissions, fuel economy, power

Transmission: No traditional transmission since series hybrid configuration eliminates need for many conventional components, including multiple shifting gear sets, clutches, hydraulic servovalves and multiple bearings

Performance: Quicker acceleration
Smooth, shiftless acceleration
Performs equally well in start-and-stop urban traffic and at highway speeds

Benefits:

Compared with conventional diesel transit buses, the Orion VII provides 30 – 40% improved fuel economy and significant reductions in emissions, including:

- ***Particulates***, 85%
- ***Oxides of nitrogen (smog),*** 40%
- ***Carbon monoxide***
- ***Greenhouse gases***