

# DIESEL-ELECTRIC HYBRID



**REDUCES FUEL  
CONSUMPTION AND EMISSIONS  
BY UP TO 30%**

Hybrid buses can lead to significant gains in efficiency, but optimum system configuration and potential gains in efficiency are highly dependent on the application. Hybrid technology is perfect in frequent stop and go conditions. There's a solution for every city. Our team of experts is here to help you make the smart choice.

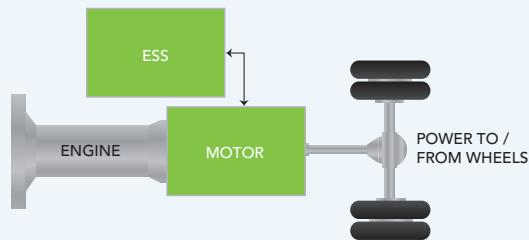
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# PARALLEL VS. SERIES HYBRID TECHNOLOGY

## HOW DOES IT WORK?

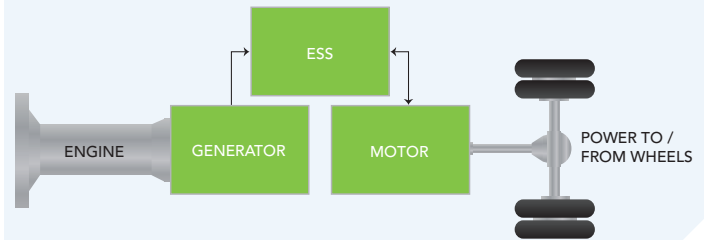
### LFS HEV | PARALLEL

- The diesel engine and electric motor are both connected to the driving wheels.
- In stop-and-go traffic in town, the vehicle is mainly powered by the electric motor.
- At highway speeds, the bus is powered by the diesel engine.
- During acceleration, both motors drive the wheels.
- By using both energy sources in parallel, power to the wheels is assured in all conditions.



### LFS HEV | SERIES

- Only the electric motor is connected to the wheels.
- The diesel engine is connected to an electric generator which converts the energy produced into electric power. This electricity powers an electric motor which drives the wheels.
- The generator also recharges a battery pack which provides supplemental power to the electric motor.
- Since the diesel engine is not connected to the wheels in combination with fully electric driven accessories, it can run at an optimum rate and can even be switched off for short periods of time for temporary fully-electric operation.



SPECIFICATIONS	LFS HEV		LFS ARTIC HEV	
	PARALLEL	SERIES	PARALLEL	SERIES
TECHNOLOGY	PARALLEL	SERIES	PARALLEL	SERIES
LENGTH	40.0'		62.0'	
SEATING CAPACITY	Up to 41		Up to 62	
LOADED CAPACITY (SEATED AND STANDING)	Up to 80		Up to 112	
ELECTRIC/ELECTRONIC SYSTEM	Volvo multiplex system (VBEA)			
CORROSION-RESISTANT OUTSIDE SHELL	Fiberglass and thermoplastic skirt panels			
ROOF-MOUNTED HVAC	Multiplex control Carrier heater Thermo King Athenia			
STRUCTURE	Stainless steel			
ENGINE	Cummins ISL 8.9 330 HP*	Cummins ISB 6.7 280 HP*	Cummins ISL 8.9 330 HP*	Cummins ISL 8.9 330 HP*
TRACTION DRIVE	Allison H 40 EP	BAE HDS200	Allison H 50 EP	BAE HDS300
RADIATOR	Nova eCooling System			
AXLES	Front ZF RL-85 Rear ZF AV-132		Front ZF RL-85 Mid ZF AVN-132 Rear ZF AV-132	
BRAKES	ABS disc w/ traction control			
FUEL TANK CAPACITY	125 US gal. (473 litres)		125 US gal. (473 litres)	

These specifications are based on the latest product information available at press time and are subject to change. Contact your Nova Bus Regional Sales Manager for complete details on standard features and options available.

\* Hybrid Rating: maximum power controlled by Hybrid System

1 800 350-6682 | novabus.com

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