

PRODUCT SHEET

60KW FCEV POWERTRAIN - VPT60N

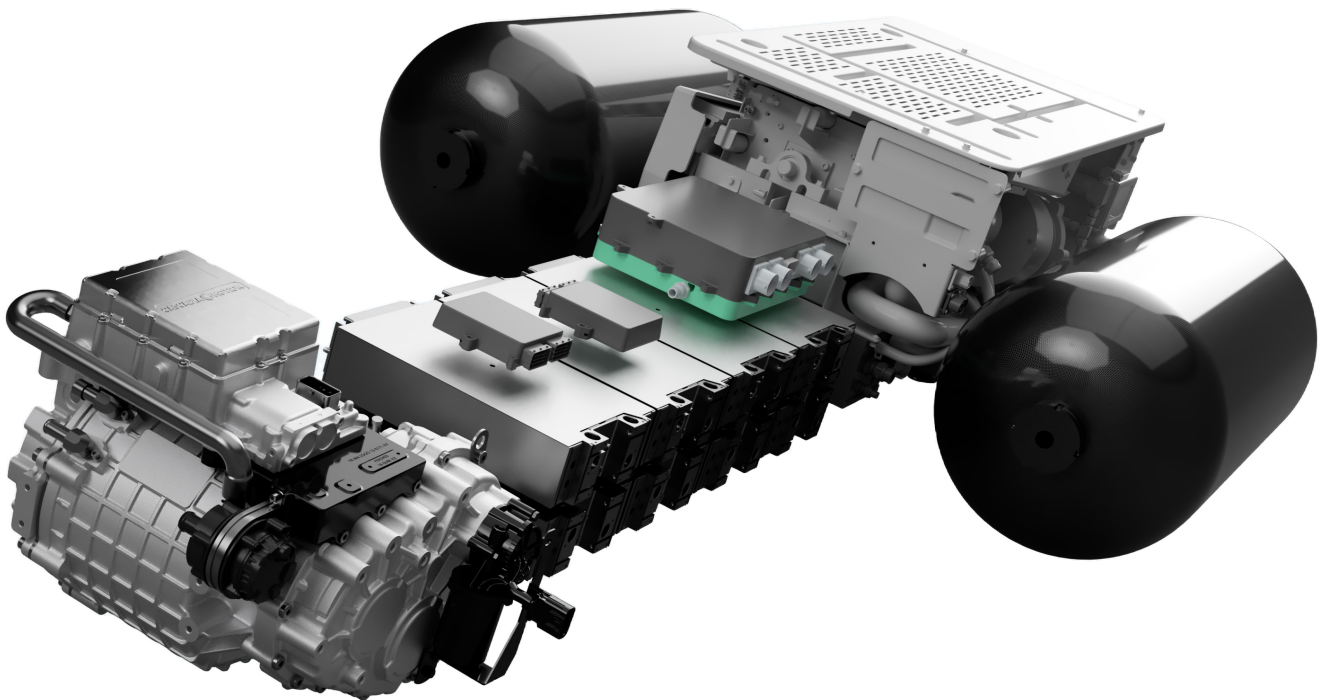
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OVERVIEW

The Viritech VPT60N Powertrain combines an array of Viritech powertrain products and enabling technologies into a complete powertrain solution for OEMs, Tier1's and Research Bodies allowing for the rapid deployment of hydrogen fuel cell electric vehicles. The battery energy store and hydrogen storage are both available in a range of form factors to aid packaging on vehicle. A standardised option is available for both to minimise lead-times. The Powertrain is delivered with all system integrations between powertrain components completed and the VCU preconfigured for system start up within the vehicle.

KEY POINTS

- Complete FCEV Powertrain
- 60KW Fuel Cell And Up To 225KW Deployable.
- Includes Tri-Volt™ Energy Management
- Highly Configurable And Modular Design



Example Powertrain Configuration



View this product on our website at www.viritech.co.uk/pt60

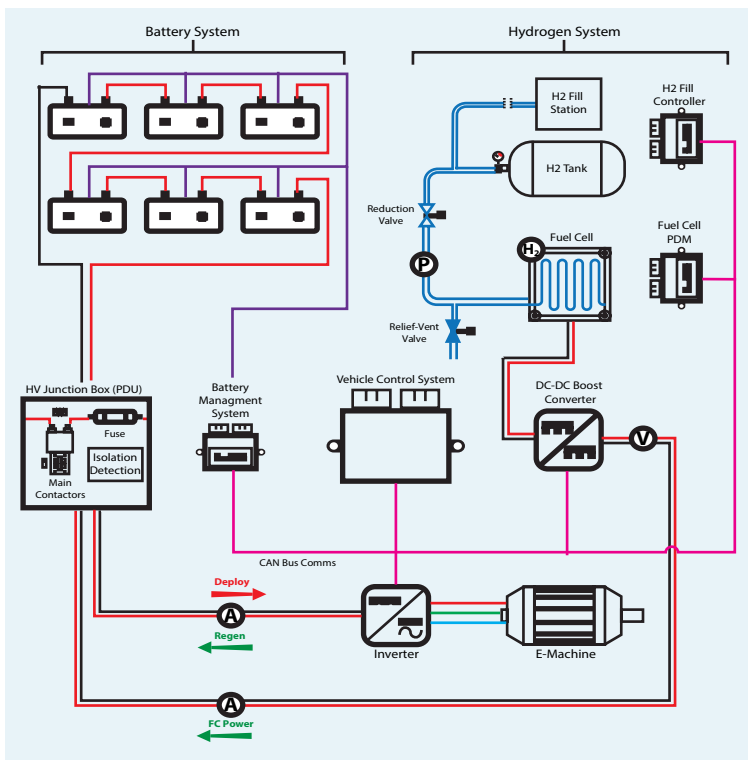
PRODUCT DESCRIPTION

The Viritech VPT60N Powertrain combines an array of Viritech powertrain products and enabling technologies into a complete powertrain solution for OEMs, Tier1's and Research Bodies allowing for the rapid deployment of hydrogen fuel cell electric vehicles. The battery energy store and hydrogen storage are both available in a range of form factors to aid packaging on vehicle. A standardised option is available for both to minimise lead-times. The Powertrain is delivered with all system integrations between powertrain components completed and the VCU preconfigured for system start up within the vehicle.

Power delivery and energy management are highly configurable whilst the modular design of the powertrain allows for easy integration across many applications.

The Powertrain is offered in a none homologated form for prototype and development vehicle use with Viritech's engineering division able to support vehicle integration and development (including HMI and functional safety case) to achieve a fully homologated end vehicle.

System Diagram



PRODUCT ORDERING

Please contact sales@viritech.co.uk to discuss your system and vehicle integration requirements for this product.

Technical Information

Fuel Cell Power Output	60kW
Fuel Cell Cooling	Liquid via dedicated loop
Hydrogen Storage	Circa 5KG*
Hydrogen Storage Pressure	350bar
Battery System Capacity	16kWh
Battery System Chemistry	LTO
Battery Management System	Viritech BMS
Battery System Cooling	Liquid via dedicated loop
E-Machine Output	Up To 225kW*
Inverter Rating	300kW
E-Machine and Inverter Cooling	Liquid via dedicated loop
DC/DC Converter	LV and HV DC/DC Converters
DC/DC Converter Cooling	Liquid via dedicated loop
High Voltage Bus Nominal Voltage	400V
Low Voltage Bus Nominal Voltage	12V or 24V
Vehicle Control System	Viritech VCS
Vehicle Safety Systems	HVIL, Torque Request, Battery SOH
High Voltage Safety	Full Interlock Implementation with Isolation Detection.
OEM Part Numbering	Yes
Vehicle Communications	CANBus*
	* Customisation Option Available